Franziska Oehmer-Pedrazzi
Sabrina Heike Kessler
Edda Humprecht
Katharina Sommer
Laia Castro *Hrsg.*

Standardisierte Inhaltsanalyse in der Kommunikationswissenschaft – Standardized Content Analysis in Communication Research

Ein Handbuch - A Handbook

OPEN ACCESS



Standardisierte Inhaltsanalyse in der Kommunikationswissenschaft – Standardized Content Analysis in Communication Research

Franziska Oehmer-Pedrazzi ·
Sabrina Heike Kessler · Edda Humprecht ·
Katharina Sommer · Laia Castro
(Hrsg.)

Standardisierte Inhaltsanalyse in der Kommunikationswissenschaft – Standardized Content Analysis in Communication Research

Ein Handbuch - A Handbook



Hrsg.
Franziska Oehmer-Pedrazzi
Fachhochschule Graubünden
Bern, Schweiz

Edda Humprecht
Department of Sociology and Political Science, Norwegian University of Science and Technology, Trondheim, Norwegen

Laia Castro
IKMZ – Institut für Kommunikationswissenschaft und Medienforschung
Universität Zürich
Zürich, Schweiz

Sabrina Heike Kessler
IKMZ – Institut für Kommunikationswissenschaft und Medienforschung
Universität Zürich
Zürich, Schweiz

Katharina Sommer
Zürcher Hochschule für Angewandte Wissenschaften (ZHAW)
Winterthur, Schweiz



The open access publication of this book has been published with the support of the Swiss National Science Foundation.

ISBN 978-3-658-36178-5 ISBN 978-3-658-36179-2 (eBook)
https://doi.org/10.1007/978-3-658-36179-2

Die Deutsche Nationalbibliothek verzeichnet diese Publikation in der Deutschen Nationalbibliografie; detaillierte bibliografische Daten sind im Internet über http://dnb.d-nb.de abrufbar.

Lektorat/Planung: Barbara Emig-Roller
Springer VS ist ein Imprint der eingetragenen Gesellschaft Springer Fachmedien Wiesbaden GmbH und ist ein Teil von Springer Nature.
Die Anschrift der Gesellschaft ist: Abraham-Lincoln-Str. 46, 65189 Wiesbaden, Germany

Inhaltsverzeichnis

Herausgeber- und Autorenverzeichnis

Über die Herausgeber

Dr. Franziska Oehmer-Pedrazzi is a senior research and teaching associate at the University of Applied Sciences of the Grisons. She holds a PhD in Communication Science from the University of Zurich and a Bachelor in Law. Her research interests include mediatization (of law), political communication and digital media governance.

Dr. Sabrina Heike Kessler is a senior research and teaching associate at the Division of Science, Crisis, & Risk Communication of the Department of Communication and Media Research, University of Zurich (Switzerland). She holds a PhD in communication science from the Friedrich Schiller University Jena (Germany). Her research interests include science and health communication as well as online search and perception behavior.

Prof. Dr. Edda Humprecht is Associate Professor at the Norwegian University of Science and Technology (NTNU) and Senior Research and Teaching Associate at UZH. Her research focuses on disinformation, political news, and media systems.

Dr. Katharina Sommer is a senior research associate at the Zurich University of Applied Sciences ZHAW. She holds a PhD in Communication Science from the University of Zurich. Her research focuses on the role of emotions and intergroup dynamics for media effects and on effects of advertising.

Prof. Dr. Laia Castro is a postdoctoral researcher at the Department of Communication and Media Research (IKMZ) at the University of Zurich and tenure track assistant professor at Universitat Internacional de Catalunya - Barcelona. She received her PhD in Social Sciences from the University of Fribourg in 2017. Her main research interests lie at the intersection of political communication, international and comparative media research and public opinion.

Autorenverzeichnis

Dr. Sina Blassnig Universität Zürich, IKMZ, Zurich, Switzerland

Dr. Johannes Breuer GESIS – Leibniz Institute for the Social Sciences, Cologne, Germany Center for Advanced Internet Studies, Bochum, Germany

Asst. Prof. Dr. Laia Castro Departament de Ciències de la Comunicació and IKMZ, Universitat Internacional de Catalunya & Universität Zürich, Barcelona, Spanien

Dr. Katharina Esau Heinrich Heine Universität Düsseldorf, Düsseldorf, Germany

Prof. Gema García-Albacete Universidad Carlos III de Madrid, Getafe, Spanien

Dr. Theresa Gessler Institut für Politikwissenschaft, Universität Zürich, Zürich, Schweiz

Janine Greyer-Stock Institut für Publizistik- und Kommunikationswissenschaft, Freie Universität Berlin, Berlin, Deutschland

Dr. Lars Guenther Universität Hamburg, JKW, Hamburg, Deutschland

Dr. Gwendolin Gurr Departement für Kommunikationswissenschaft und Medienforschung, Université de Fribourg/Universität Freiburg, Fribourg, Switzerland

Valerie Hase Department of Media and Communication, LMU Munich, München, Deutschland

Prof. Dr. Edda Humprecht IKMZ – Institut für Kommunikationswissenschaft und Medienforschung, Norwegian University of Science and Technology, Trondheim, Norwegen

Dr. Maarit Jaakkola Nordicom, University of Gothenburg, Gothenburg, Schweden Department of Journalism, Media and Communication

Dr. Marc Jungblut Institut für Kommunikationswissenschaft und Medienforschung, Ludwig-Maximilians-Universität München, München, Germany

Dr. Sabrina Heike Kessler IKMZ – Institut für Kommunikationswissenschaft und Medienforschung, Universität Zürich, Zürich, Schweiz

Miriam Klein Institut für Publizistik, Johannes Gutenberg-Universität Mainz, Mainz, Germany

Constanze Küchler Institut für Medien, Wissen und Kommunikation, Universität Augsburg, Augsburg, Germany

Dr. Melanie Leidecker-Sandmann Department für Wissenschaftskommunikation, Karlsruher Institut für Technologie (KIT), Karlsruhe, Germany

Dr. Dennis Lichtenstein Market and Audience Insights (MAI), Deutsche Welle, Bonn, Germany

Prof. Dr. Juliane A. Lischka Journalistik und Kommunikationswissenschaft, Universität Hamburg, Hamburg, Germany

Felicia Loecherbach Department of Communication Science, Vrije Universiteit Amsterdam, Amsterdam, Netherlands

Daniela Mahl Universität Zürich, IKMZ – Institut für Kommunikationswissenschaft und Medienforschung, Zürich, Schweiz

Dr. Sílvia Majó-Vázquez Reuters Institute for the Study of Journalism, University of Oxford, Oxford, United Kingdom

Dr. Sarah Marschlich Universität Zürich, IKMZ, Zurich, Schweiz

Prof. Dr. Julia Metag Institut für Kommunikationswissenschaft, Westfälische Wilhelms-Universität Münster, Münster, Germany

Prof. Dr. Teresa K. Naab Institute of Media and Communication Studies, University of Mannheim, Mannheim, Germany

Dr. Cordula Nitsch Universität Augsburg, IMWK, Augsburg, Deutschland

Dr. Franziska Oehmer-Pedrazzi Fachhochschule Graubünden, Bern, Schweiz

Angela Osterheider Objective 2/Fostering Knowledge Exchange, Berlin University Alliance, Berlin, Deutschland

Stefano Pedrazzi DCM, Universität Freiburg, Freiburg, Schweiz

Dr. Daniel Possler Institut für Journalistik und Kommunikationsforschung, Hochschule für Musik, Theater und Medien Hannover, Hannover, Germany

Prof. Dr. Senja Post Karlsruher Institut für Technologie (KIT), Karlsruhe, Deutschland

Prof. Dr. Doreen Reifegerste Fakultät für Gesundheitswissenschaften, Universität Bielefeld, Bielefeld, Deutschland

Prof. Dr. Liane Rothenberger KU Eichstätt-Ingolstadt, Eichstätt, Deutschland

Caroline von Samson-Himmelstjerna Institut für Publizistik- und Kommunikationswissenschaft, Freie Universität Berlin, Berlin, Germany

Dr. Lisa Schwaiger IKMZ – Institut für Kommunikationswissenschaft und Medienforschung, Universität Zürich, Zürich, Schweiz

Dr. Markus Schäfer Institut für Publizistik, Johannes Gutenberg-Universität Mainz, Mainz, Deutschland

Prof. Dr. Mike S. Schäfer IKMZ – Institut für Kommunikationswissenschaft und Medienforschung, Universität Zürich, Zürich, Schweiz

Dr. Katharina Sommer Zürcher Hochschule für Angewandte Wissenschaften (ZHAW), Winterthur, Schweiz

Anna Staender Universität Zürich, IKMZ, Zurich, Switzerland

Desiree Steppat Landesanstalt für Medien NRW, Düsseldorf, Germany

Prof. Dr. Mariken A. C. G. van der Velden Department of Communication Science, Vrije Universiteit Amsterdam, Amsterdam, Netherlands

Dr. Daniel Vogler IKMZ – Institut für Kommunikationswissenschaft und Medienforschung, Universität Zürich, Zürich, Schweiz

Catharina Vögele Universität Hohenheim, Leonberg, Deutschland

Jana Kim Wegner Wiesbaden, Deutschland

Nina Wicke Institut für Kommunikationswissenschaft (IfKW), TU Braunschweig, Braunschweig, Germany

Annemarie Wiedicke Institut für Kommunikationswissenschaft und Medienforschung, LMU München, München, Deutschland

Dr. Tim Wulf Institut für Kommunikationswissenschaft und Medienforschung, Ludwig-Maximilians-Universität München, Munich, Germany

Dr. Jing Zeng Universität Zürich, IKMZ, Zürich, Switzerland

Basics & Procedures Content Analysis
[Grundlagen & Prozesse der Inhaltsanalyse]



Einleitung

Franziska Oehmer-Pedrazzi, Sabrina Heike Kessler, Edda Humprecht, Katharina Sommer und Laia Castro

1 Idee & Zielstellung

Die Erkenntnis, wissenschaftliches Wissen und Methoden für Forschende, Studierende und Interessierte weltweit frei zugänglich zu machen, rückt zunehmend in den Fokus sozial- und kommunikationswissenschaftlicher Debatten in Fachzeitschriften (bspw. die *Agenda for Open Science in Communication* von Dienlin et al. 2020 im Journal of

F. Oehmer-Pedrazzi (✉)
Fachhochschule Graubünden, Bern, Schweiz
E-Mail: franziska.oehmer@fhgr.ch

S. H. Kessler
IKMZ - Institut für Kommunikationswissenschaft und Medienforschung, Universität Zürich, Zürich, Schweiz
E-Mail: s.kessler@ikmz.uzh.ch

E. Humprecht
Department of Sociology and Political Science, Norwegian University of Science and Technology, Trondheim, Norwegen
E-Mail: edda.humprecht@ntnu.no
Zürcher Hochschule für Angewandte Wissenschaften (ZHAW), Zürich, Schweiz

K. Sommer
ZHAW - Zürcher Hochschule für Angewandte Wissenschaften, Winterthur, Schweiz
E-Mail: katharina.sommer-vonschoenberg@zhaw.ch

L. Castro
IKMZ - Institut für Kommunikationswissenschaft und Medienforschung, Universität Zürich, Zürich, Schweiz
E-Mail: l.castro@ikmz.uzh.ch

F. Oehmer-Pedrazzi et al. (Hrsg.), *Standardisierte Inhaltsanalyse in der Kommunikationswissenschaft – Standardized Content Analysis in Communication Research*, https://doi.org/10.1007/978-3-658-36179-2_1

Communication) und auf Tagungen (bspw. Open Communication als übergeordnetes Thema der Jahrestagung 2020 der International Communication Association, ICA): Diskutiert werden dabei v. a. die Möglichkeiten und Herausforderungen der Veröffentlichung von a) Analyseinstrumenten *(open method),* b) Untersuchungssoftware *(open science tools),* c) gewonnenen quantitativen und qualitativen Daten *(open data)* und d) Erkenntnissen *(open access).* Auf diese Art und Weise, so das Kernargument, könne Wissen zugänglich und Forschung nachvollzieh-, replizier- und auch überprüfbar gemacht werden. Damit wiederum könne eine wichtige Voraussetzung für die Legitimation und Beachtung wissenschaftlicher Befunde geschaffen werden (Asendorpf et al. 2013; Nosek et al. 2015). Für die Forschung bedeutet diese Entwicklung einer Open Science-Kultur auch, dass auf der Basis schon bestehender, leicht zugänglicher Erkenntnisse schneller fundierte neue Studien entstehen können, die eine hohe Anschlussfähigkeit haben (Munafò et al. 2017).

Als wir im Winter 2018 erstmals über das vorliegende *Handbuch Standardized Content Analysis* und die dazugehörige *Database of Categories for Content Analysis* (DOCA) nachdachten, war uns schnell klar, dass wir diesem Gedanken der *Open Science*-Bewegung Rechnung tragen möchten: Unser Ziel ist es daher, Wissen über die Anwendungsfelder und die Erhebungsinstrumente der standardisierten Inhaltsanalyse und damit über eine der zentralsten Methoden kommunikationswissenschaftlicher Forschung für WissenschaftlerInnen und Studierende zu sammeln, zu systematisieren, zu reflektieren und im Sinne von open method und open access frei zugänglich zu machen. Denn ganz egal, ob Fragen nach gesellschaftlichen Veränderungen, journalistischen Entscheidungen oder funktionalen und dysfunktionalen Wirkungen von Medien im Fokus der Forschung stehen, die Inhaltsanalyse hilft dabei, Antworten zu finden.

Im vorliegenden *Handbuch* wird erstens der inhaltsanalytische Forschungsstand verschiedener kommunikationswissenschaftlicher Forschungs- und Themenbereiche aufgearbeitet und online veröffentlicht. In der dazugehörigen Database of Variables for Content Analysis (DOCA) https://www.hope.uzh.ch/doca werden Variablenbeschreibungen für inhaltsanalytische Fragestellungen unter Berücksichtigung von Qualitätsindikatoren (wie bspw. Reliabilitätswerte) zusammengetragen, systematisiert und offen recherchierbar gemacht. Das Handbuch bietet den kontextuellen Rahmen für die Datenbank. Darin erwähnte Konstrukte/Variablen können direkt in der Datenbank gefunden werden.

Das Buch und die Datenbank bieten damit einen Ausgangspunkt für die Operationalisierung inhaltsanalytischer Fragestellungen wissenschaftlicher Projekte von Forschenden und Studierenden. Die Abhängigkeit von einer aufwendigen und nicht immer erfolgversprechenden Recherche nach (unveröffentlichten) Codebüchern in Archiven, Datenbanken oder über persönliche und professionelle Netzwerke wird damit deutlich eingeschränkt. Das Risiko des unnötigen Mehraufwandes, bereits (ähnliche oder identische) bestehende Konstrukte/Variablen immer wieder neu zu entwickeln, wird so vermindert. Damit soll zudem auch eine Grundlage zur Vereinheitlichung (wo möglich und sinnvoll) und damit auch Vergleichbarkeit inhaltsanalytischer Studien geschaffen werden. Das Handbuch und die Datenbank können zudem auch in der

Methodenausbildung Verwendung finden. Ferner soll damit ein Beitrag zur Chancengleichheit zwischen ressourcenstarken und -schwächeren Instituten, Universitäten und Ländern in diesem Bereich geleistet werden.

2 Konzept & Vorgehen

Das Handbuch bündelt und systematisiert den aktuellen Forschungsstand inhaltsanalytischer Studien nach relevanten Themenfeldern und -bereichen. Der Fokus liegt dabei auf Forschungserkenntnissen, die anhand von standardisierten (manuellen und – falls Forschung dazu vorliegt – auch automatisierten) Inhaltsanalysen gewonnen worden sind. Wenn sich das jeweilige Forschungsfeld jedoch durch vor allem nicht-standardisierte, qualitative Verfahren auszeichnet oder nur wenig standardisierte Forschung in dem jeweiligen Bereich auffindbar ist, so wurden auch diese berücksichtigt, da diese Informationen für die zukünftige standardisierte Operationalisierung von Relevanz sein können. Als AutorInnen konnten und wollten wir insbesondere WissenschaftlerInnen in der Qualifikationsphase gewinnen, da vor allem diese im Rahmen von Dissertationen und Habilitationen intensiv an Operationalisierungen von Inhaltsanalysen arbeiten. Die ExpertInnen wurden aufgrund ihrer Expertise im jeweiligen Gebiet ausgewählt. Ihnen oblag es, die oftmals breit definierten Forschungsfelder einzugrenzen und die aus ihrer Sicht relevanten Konstrukte und Variablen auszuwählen – nicht aber, die ganze Breite des jeweiligen Feldes abzubilden. Wir haben nicht nur AutorInnen aus dem deutschsprachigen Raum, sondern auch internationale ExpertInnen angefragt. Dies spiegelt sich auch in der Zweisprachigkeit des Handbuchs wider: Ein Großteil der Kapitel wurde auf englisch verfasst und steht somit auch einem größeren LeserInnenkreis zur Verfügung.

Das Handbuch gliedert sich in sechs Teile: In Teil I werden Grundlagen zur standardisierten Inhaltsanalyse, den zentralen Forschungsdesigns (u. a. auch zu mixed method apporaches) und übergreifenden Variablen vermittelt. Hier werden zentrale Begriffe erläutert, die in den nachfolgenden Kapiteln eine strukturierende Funktion übernehmen. Im Anschluss folgen die Kapitel, die sich mit dem Forschungsstand inhaltsanalytischer Studien über Nachrichtenjournalismus befassen (Teil II). Dazu zählen u. a. Kapitel zu News Performance, zur Wahlkampfberichterstattung oder auch zum Wissenschaftsjournalismus. Teil III widmet sich Analysen, die sich mit fiktionalen Medieninhalten (Filme, Satire, Games, …) auseinandersetzen. Der inhaltsanalytischen Forschung zur Kommunikation von professionellen, nicht-journalistischen KommunikatorInnen gilt die Aufmerksamkeit der Kapitel in Teil IV. Dazu zählt bspw. die Forschung zur Public Diplomacy oder Unternehmenskommunikation. Inhaltsanalytische Forschung zu mehrheitlich nicht professioneller Kommunikation ist der Fokus der Beiträge in Teil V, die sich den Themen NutzerInnenkommentare oder auch Verschwörungstheorien widmen. Die zentralen Erkenntnisse und Leistungen des Handbuchs sowie die Identifikation von Forschungslücken, die weitere inhaltsanalytische Forschung anregen soll, erfolgt im abschließenden Fazit (Teil VI). Jeder Beitrag behandelt dabei die

im jeweiligen Forschungsgebiet zentralen Fragestellungen, dominierenden theoretischen Perspektiven, Forschungsdesigns und -desiderata. Der Fokus der Beiträge liegt jedoch auf der Darstellung der Hauptbefunde und Trends inhaltsanalytischer Studien unter besonderer Berücksichtigung der verwendeten Konstrukte/Variablen. Konstrukte/Variablen, die in der Datenbank konkretisiert werden, sind unterhalb der jeweiligen Beiträge mit den entsprechenden Links gelistet.

Die *Datenbank* bündelt, systematisiert und bewertet relevante inhaltsanalytische Variablen der im Handbuch erwähnten Forschungsbereiche und -themen. Die AutorInnen der Kapitel im Handbuch zeichneten sich auch zu einem großen Teil für die jeweiligen Datenbankeinträge verantwortlich. Ausgewählt wurden solche Operationalisierungen, die aktuell, relevant (Indikatoren: Zitationshäufigkeit, ExpertInnenmeinung), zugänglich waren und/oder Qualitätsindikatoren (Reliabilität) berichteten. Die Infrastruktur, das Hosting und die technische Unterstützung wird durch das Team von HOPE – Hauptbibliothek Open Publishing der Universität Zürich zur Verfügung gestellt. Damit kann auch ein dauerhafter Betrieb und damit ein Wachsen der Datenbank ermöglicht werden. Denn die Datenbank soll nicht nur die im Handbuch beschriebenen relevanten Konstrukte/Variablen enthalten. Sie soll vielmehr zu einer umfassenden Recherchedatenbank für Variablen werden. Vorschläge für weitere Variablen können daher jederzeit auf der Datenbank eingereicht werden.

Dank

„Eine Idee muss Wirklichkeit werden können, oder sie ist nur eine eitle Seifenblase“ (Berthold Auerbach). Dass das vorliegende Handbuch und die dazugehörige Datenbank nicht nur Seifenblasen geblieben sind, sondern realisiert werden konnten, ist vor allem der Verdienst der kompetenten und engagierten AutorInnen, die uns nicht nur mit ihrer Fachexpertise, sondern auch beim AutorInnenworkshop 2019 in Zürich mit kritischem Feedback und motivierenden Worten zum Gesamtprojekt unterstützt haben. Ihnen gilt unser größter Dank. Konstruktive Rückmeldungen und Zuspruch erhielten wir auch von unseren zahlreichen, verdienstvollen UnterstützerInnen (in alphabetischer Reihenfolge): Prof. Dr. Mark Eisenegger (Universität Zürich), Prof. Dr. Ines Engelmann (Friedrich-Schiller-Universität Jena), Prof. Dr. Frank Esser (Universität Zürich), Prof. Dr. Andreas Fahr (Universität Fribourg), Prof. Dr. Otfried Jarren (Universität Zürich), Prof. Dr. Hans Mathias Kepplinger (Universität Mainz), Prof. Dr. Julia Metag (Westfälische Wilhelms-Universität Münster), Prof. Dr. Manuel Puppis (Universität Fribourg), Prof. Dr. Mike S. Schäfer (Universität Zürich), Prof. Dr. Philomen Schönhagen (Universität Fribourg), Prof. Dr. Gabriele Siegert (Universität Zürich), Prof. Dr. Werner Wirth (Universität Zürich). Auch ihnen sind wir sehr dankbar.

Die technische Infrastruktur für die Variablendatenbank wird uns freundlicherweise der Universität Zürich zur Verfügung gestellt. Margit Dellatorre und Martin Brändle standen und stehen uns mit technischer Expertise und Know-how bei all unseren Fragen zur Verfügung. Das professionelle Layout für den PDF-Download der Datenbankbeiträge gestaltete Petra Dollinger, Graphic Designer von SIVIC Scientific Visualisation

and Visual Communication der Universität Zürich. Das Logo zur Datenbank kreierte Francesca Müller. Miriam Cano Pardo und Mirjam Baumann waren als studentische Redaktionsassistentinnen von unschätzbarem Wert. Ihre Stellen konnten aus Fördergeldern des Fellowprogramms „Freies Wissen“, das von Wikimedia Deutschland, dem Stifterverband und der VolkswagenStiftung, getragen wird, sowie durch die Unterstützung des IKMZ – Instituts für Kommunikationswissenschaft und Medienforschung der Universität Zürich finanziert werden. Das Fellowprogramm „Freies Wissen“ half uns zudem unsere Kenntnisse über Möglichkeiten, Herausforderungen und Best Practices von Open Science zu vertiefen. Dem Springer Verlag und insbesondere Frau Emig-Roller danken wir für die Unterstützung und Beratung sowie das Entgegenkommen das Handbuch mit der Datenbank zu verknüpfen. Unsere Herausgeberinnentreffen sowie der AutorInnen-Workshop wurde großzügig vom Graduate Campus der Universität Zürich ermöglicht. Die Open Access Veröffentlichung des Handbuchs wurde durch den Schweizerischen Nationalfonds ermöglicht.

Literatur

Asendorpf, J.B., Conner, M., De Fruyt, F., De Houwer, J., Denissen, J.J.A., Fiedler, K., & Wicherts, J.M. (2013). Recommendations for increasing replicability in psychology. Eur. J. Pers., 27: 108–119.

Dienlin T., Johannes, N., Bowman N.D., Masur, P.K, Engesser S., Kümpel A. S., & Claes de Vreese (2020). An agenda for open science in communication, *Journal of Communication*, jqz052.

Munafò, M., Nosek, B., Bishop, D. et al. A manifesto for reproducible science. *Nature Human Behaviour 1,* 0021 (2017).

Nosek, B. A., Alter, G., Banks, G. C., Borsboom, D., Bowman, S. D., Breckler, S. J., & Yarkoni, T. (2015). Promoting an open research culture. *Science, 348*, 1422–1425.

Dr. Franziska Oehmer-Pedrazzi is a senior lecturer and researcher at the University of Applied Sciences of the Grisons. She holds a PhD in Communication Science from the University of Zurich and a Bachelor in Law. Her research interests include mediatization (of law), political communication and digital media governance.

Dr. Sabrina Heike Kessler is a senior research and teaching associate at the Division of Science, Crisis, & Risk Communication of the Department of Communication and Media Research, University of Zurich (Switzerland). She holds a PhD in communication science from the Friedrich Schiller University Jena (Germany). Her research interests include science and health communication as well as online search and perception behavior. She tweets under @ SabrinaKessler.

Prof. Dr. Edda Humprecht is Associate Professor at the Norwegian University of Science and Technology (NTNU) and Senior Research and Teaching Associate at UZH. Her research focuses on disinformation, political news, and media systems.

Dr. Katharina Sommer is a senior research associate at the Zurich University of Applied Sciences ZHAW. She holds a PhD in Communication Science from the University of Zurich. Her research focuses on the role of emotions and intergroup dynamics for media effects and on effects of advertising.

Prof. Dr. Laia Castro is a postdoctoral researcher at the Department of Communication and Media Research (IKMZ) at the University of Zurich and tenure track assistant professor at Universitat Internacional de Catalunya - Barcelona. She received her PhD in Social Sciences from the University of Fribourg in 2017. Her main research interests lie at the intersection of political communication, international and comparative media research and public opinion.





Manuelle standardisierte Inhaltsanalyse

Sabrina Heike Kessler, Katharina Sommer, Edda Humprecht und Franziska Oehmer-Pedrazzi

1 Einleitung & Zielstellung

Das vorliegende Handbuch bündelt und systematisiert den Forschungsstand zu inhaltsanalytischen Studien aus der Kommunikationswissenschaft. Der Fokus liegt dabei auf standardisierten – automatisierten und manuellen – Verfahren. Die automatisierte (computergestützte) Inhaltsanalyse ist ein methodisches Verfahren, bei dem die einzelne Codierentscheidung von einem Computeralgorithmus getroffen wird und nicht von den Forschenden oder CodiererInnen (Rössler 2017). Sie hat in den vergangenen Jahren an Bedeutung gewonnen (Rössler 2017; Sommer et al. 2014) ist aber kein vollständiger Ersatz für die konventionelle Inhaltsanalyse (Früh 2017; Scharkow 2012). Vielmehr lassen sich optimale Einsatzgebiete für das eine und das andere Verfahren identifizieren

S. H. Kessler (✉)
IKMZ - Institut für Kommunikationswissenschaft und Medienforschung, Universität Zürich, Zürich, Schweiz
E-Mail: s.kessler@ikmz.uzh.ch

K. Sommer
Zürcher Hochschule für Angewandte Wissenschaften (ZHAW), Winterthur, Schweiz
E-Mail: katharina.sommer-vonschoenberg@zhaw.ch

E. Humprecht
Department of Sociology and Political Science, Norwegian University of Science and Technology, Trondheim, Norwegen
E-Mail: edda.humprecht@ntnu.no

F. Oehmer-Pedrazzi
Fachhoschule Graubünden, Bern, Schweiz
E-Mail: franziska.oehmer@fhgr.ch

F. Oehmer-Pedrazzi et al. (Hrsg.), *Standardisierte Inhaltsanalyse in der Kommunikationswissenschaft – Standardized Content Analysis in Communication Research*, https://doi.org/10.1007/978-3-658-36179-2_2

(Früh 2017; Scharkow 2012). Insbesondere die Big-Data-Forschung ist angewiesen auf automatisierte Erhebungsmethoden (Rössler 2017). Die nachfolgenden Ausführungen sollen jedoch ein Grundverständnis über Merkmale, Schritte, Qualitätskriterien und Schwerpunkte der manuellen Inhaltsanalyse vermitteln, die für die Nachvollziehbarkeit von Konzept und Idee des Handbuchs behilflich sein können. So wird in diesem Kapitel deutlich, was unter standardisierter Inhaltsanalyse – auch in Abgrenzung zur qualitativen Inhaltsanalyse – verstanden wird. Zudem werden auch Qualitätskriterien der manuellen Inhaltsanalyse skizziert, die bei der Auswahl der berichteten Studien in diesem Handbuch und auch der Operationalisierungen für die dazugehörige Datenbank zentral waren. Dieses Kapitel stellt selbstverständlich kein Äquivalent zu umfangreichen Darstellungen der Methode dar. Hierfür sei auf die entsprechend einschlägige Literatur verwiesen (u. a. Früh 2017; Brosius et al. 2012).

2 Definition & Grundlagen: Inhaltsanalyse

Die manuelle Inhaltsanalyse gilt nach wie vor als zentrale Methode kommunikationswissenschaftlicher Forschung. Bei der manuellen Inhaltsanalyse wird die Codierung, im Gegensatz zur automatisierten Inhaltsanalyse, nicht durch einen Computer durchgeführt, sondern durch menschliche CodiererInnen. In Berelsons soziologischem Werk von 1952 wurde die Inhaltsanalyse erstmals systematisch und theoretisch fundiert vorgestellt: „Content analysis is a research technique for the objective, systematic, and quantitative description of the manifest content of communication.“ (Berelson 1952: 18). Heute hat die Inhaltsanalyse längst den Status einer eigenständigen Methode erreicht und die Methodendefinitionen unterscheiden sich in einigen Punkten von Berelsons erstem Vorschlag: Merten (1995) unterscheidet und definiert insbesondere *manifeste* und *nicht-manifeste* Inhalte: „Die Inhaltsanalyse ist eine Methode zur Erhebung sozialer Wirklichkeit, bei der von Merkmalen eines manifesten Textes auf Merkmale eines nicht-manifesten Kontextes geschlossen wird“ (Merten 1995: 59). Die Diskussion um latente und manifeste Inhalte wird u. a. bei Merten (1995), Früh (2017) und Brosius et al. (2012) ausgiebig geführt. Früh (2017) verzichtet ganz auf die Unterscheidung von *manifesten* und *latenten* Inhalten, ersetzt die Beschreibung *objektiv* durch die erkenntnistheoretisch angemessenere Bezeichnung *intersubjektiv,* sowie die Bezeichnung *quantitativ* durch *standardisiert:* „Die Inhaltsanalyse ist eine empirische Methode zur systematischen, intersubjektiv nachvollziehbaren Beschreibung inhaltlicher und formaler Merkmale von Mitteilungen, meist mit dem Ziel einer darauf gestützten interpretativen Inferenz auf mitteilungsexterne Sachverhalte“ (Früh 1998: 27). Systematisch, d. h. einem System folgend, planmäßig und konsequent, geht die standardisierte Inhaltsanalyse dabei in allen Schritten des Forschungsprozesses vor. Die Intersubjektivität zielt auf die Nachvollziehbarkeit und Nachprüfbarkeit aller Schritte der Inhaltsanalyse ab. In der Forschungspraxis arbeitet die Inhaltsanalyse mit einer Kombination aus qualitativen Urteilen über (Medien-)Botschaften, die quantitativ verdichtet und ausgewertet werden (Rössler 2017).

Inhaltsanalysen lassen sich nach ihrem Standardisierungsgrad unterscheiden (Scheufele und Engelmann 2009). Rein qualitative Inhaltsanalysen berücksichtigen dezidiert die Individualität einzelner spezifisch ausgewählter Medienangebote (Rössler 2017). Zur quantitativen Inhaltsanalyse werden die Verfahren gezählt, die quantifizierend bzw. messend vorgehen und meistens auf weit größere Stichproben angewendet werden (Scheufele und Engelmann 2009). Die quantitative/standardisierte Inhaltsanalyse reduziert die Komplexität der Berichterstattung, indem sie formale und inhaltliche Merkmale großer Textmengen erfasst; d. h. deren zentrale Muster herausarbeitet (Brosius et al. 2012; Rössler 2017). Diesen Mustern wird eine größere Bedeutung zugeschrieben als dem einzelnen Fall (Rössler 2017). Nicht die ganze Komplexität eines Textes wird erfasst, sondern nur wenige ausgewählte Merkmale desselben werden reduktiv analysiert (Brosius et al. 2012).

3 Schritte in der standardisierten Inhaltsanalyse

Der Ablauf der standardisierten Analyse von Medieninhalten lässt sich in vier Phasen einteilen: In die Planungs-, Entwicklungs-, Anwendungs- und Auswertungsphase. In der ersten Phase der Planung werden der Forschungsstand aufgearbeitet, die Grundgesamtheit bestimmt und die zentralen Konstrukte, die empirisch erfasst werden sollen, festgelegt. Daraufhin beginnt die konkrete Entwicklung der Inhaltsanalyse. Die Forschenden legen fest, welche medialen Inhalte sie untersuchen, wie gegebenenfalls eine Stichprobe aus der Grundgesamtheit gezogen wird und in welcher Analyse- bzw. Codiereinheit die Inhalte untersucht werden (Früh, 1998, 2017; Rössler, 2017).

Planungsphase: Grundgesamtheit & Stichprobenverfahren
Die Festlegung der Grundgesamtheit ist zentral in der Planung und Entwicklung einer Inhaltsanalyse. Entlang der Forschungsfrage muss erstens entschieden werden, wie weit der Untersuchungsgegenstand definiert ist, also, ob bspw. die Inhalte zu einem konkreten Ereignis, Inhalte zu einem Themengebiet, themenunabhängige Inhalte eines bestimmten Mediums oder eines bestimmten Mediengenres untersucht werden sollen. Dadurch wird die Auswahleinheit entlang eines zeitlichen, räumlichen und inhaltlichen Geltungsbereichs festgelegt (Rössler 2017). Zweitens muss durch die so definierte Grundgesamtheit im Hinblick auf die darin enthaltene Anzahl der Elemente entschieden werden, ob eine Vollerhebung durchgeführt werden kann oder ob auf eine Stichprobe zurückgegriffen werden muss. Bei der Festlegung einer Stichprobe lässt sich zwischen willkürlicher, zufälliger und systematischer Auswahl unterscheiden (für eine breite Übersicht siehe Krippendorff 2018). Willkürliche Stichproben sind häufig auf Verfügbarkeitsrestriktionen von Medieninhalten zurückzuführen. Im Grunde handelt es sich bei willkürlichen Stichproben um Vollerhebungen, da nur eine Aussage über die untersuchten Medieninhalte getroffen werden kann und ein Inferenzschluss auf eine Grundgesamtheit nicht zulässig wäre (Riffe et al. 2019).

Um einen repräsentativen Rückschluss auf die Grundgesamtheit zu ziehen, ist streng genommen eine Zufallsauswahl Voraussetzung (Schnell et al. 2018). Eine einfache Zufallsauswahl von Elementen aus der Grundgesamtheit ist im Falle der Inhaltsanalyse allerdings sehr aufwändig: Es müssten in einem ersten Schritt alle Elemente eindeutig identifiziert werden, um dann nach dem Zufallsprinzip die zu untersuchenden Medieninhalte auszuwählen. Findet in einem ersten Schritt eine Begrenzung des Materials bspw. durch die Festlegung von Prototypen für die Fragestellung statt (werden bspw. bestimmte Medien oder Medienformate als typische Boulevard- und andere als typische Qualitätsmedien definiert), und werden diese Prototypen als Grundlage für eine zufällige Stichprobe herangezogen, dann kann von einer geschichteten Zufallsstichprobe gesprochen werden (Rössler 2017). Bei der systematischen Stichprobenziehung werden Elemente nach einem festgelegten Intervall ausgewählt – zum Beispiel wird eine künstliche Woche als Stichprobe erzeugt, indem nach einer Regel mit einem zufälligen Startpunkt jeder Wochentag für die Untersuchung ermittelt wird, so dass sich insgesamt eine nicht natürlich zusammenhängende Untersuchungswoche ergibt (Riffe et al. 2019, 1993). Wenngleich es sich bei diesem Vorgehen nicht um eine Zufallsstichprobe handelt und somit statistisch nicht von Repräsentativität gesprochen werden kann, können durch die innerhalb der Stichprobe ermittelten Zusammenhänge im Sinne eines Plausibilitätsschlusses durchaus Rückschlüsse auf die weiteren, nicht untersuchten Medieninhalte gezogen werden, sofern transparent gemacht wird, nach welcher Systematik die Stichprobe entstanden ist (Jandura et al. 2005; Riffe et al. 2019). Der Vorteil dieses Vorgehens liegt darin, dass im Unterschied zu einer Klumpenstichprobe, wenn also innerhalb eines festgelegten Clusters alle Elemente codiert werden wie bspw. die Analyse der Berichterstattung in einer natürlichen Woche, Einflüsse außergewöhnlicher Ereignisse auf die Befunde geringer ausfallen (Wolling 2005).

Im Gegensatz zu gedruckten oder linearen Medieninhalten steht die Analyse von Online-Inhalten bezüglich der Definition der Grundgesamtheit wie auch der Stichprobenziehung vor großen Herausforderungen. Mediale Inhalte setzen sich hier aus unterschiedlichen Formaten wie Text, Animationen, Video- oder Audioangeboten zusammen, sie liegen nicht in einer linearen Form vor, sondern werden verlinkt, personalisiert dargestellt und schnell wieder gelöscht (Emmer und Strippel 2015; Skalski et al. 2017; Welker und Wünsch 2010). Durch die Flüchtigkeit, Dynamik und die Personalisierung der Inhalte ist eine Archivierung und somit eine klare Umgrenzung der Grundgesamtheit äußerst schwierig (Karlsson und Sjovaag 2015; Meier et al. 2010; Riffe et al. 2019). Schon im Jahr 2000 regte McMillan (2000) an, methodologische Forschung zum Sampling von Internetinhalten für Inhaltsanalysen voranzutreiben, um neue Standards der Stichprobenziehung zu etablieren. Während bisher die Schwierigkeiten von Stichprobenziehungen bspw. mit Hilfe von Suchmaschinen diskutiert werden, liegt bisher noch keine standardisierte Lösung vor. Vielmehr wird angeregt, in Veröffentlichungen den Prozess der Definition der Grundgesamtheit und der Stichprobenziehung transparent darzustellen und auch die damit verbundenen Probleme offen zu diskutieren (Meier et al., 2010).

Entwicklungsphase: Erstellen des Codebuchs & Kategorienbildung
Nach der Auswahl des Untersuchungsmaterials wird die Analyse- bzw. Codiereinheit bestimmt. Als Analyseeinheit wird die kleinstmögliche Einheit der Auswertung verstanden – und dies ist die Ebene, auf der codiert wird (Rössler 2017): Zwar lassen sich die codierten Variablen in der späteren Analyse aggregieren, allerdings kann nicht detaillierter analysiert werden, als codiert wurde. Somit werden Analyse- und Codiereinheit nach diesem Verständnis häufig synonym genutzt. Eine Codierung muss nicht auf einer Analyseebene stattfinden, sondern kann unterschiedliche Ebenen vereinen. So können bspw. Variablen auf der Ebene eines Zeitungsartikels erhoben, etwa das Thema des Beitrags, und daraufhin auf Absatz- oder Argumentebene weitere Variablen codiert werden. Häufig sind diese unterschiedlichen Ebenen hierarchisch gegliedert und durch eine eindeutige ID bzw. Schlüsselvariable einander zugeordnet (Brosius et al. 2012; Rössler 2017).

Die Ausarbeitung des Codebuchs nimmt in der Entwicklungsphase die größten Ressourcen in Anspruch. Um intersubjektive Nachvollziehbarkeit zu gewährleisten und der Gefahr entgegenzuwirken, dass Entscheidungsheuristiken der CodiererInnen die Codierung dominieren (Wirth 2001), muss das Codebuch umfassende Definitionen der Kategorien bzw. Variablen, genaue Codieranweisungen, Codierbeispiele und -gegenbeispiele enthalten. Zu jeder Kategorie bzw. Variablen werden trennscharfe und erschöpfende/vollständige Ausprägungen entwickelt (Brosius et al. 2012). In den Codieranweisungen sollte präzise beschrieben werden, welche Eigenschaften des Inhalts dazu führen, dass eine Ausprägung als zutreffend angegeben wird. Dabei helfen auch die Beispiele, ebenso wie die Gegenbeispiele und Grenzfälle. An ihnen wird erläutert, warum eine Ausprägung als zutreffend oder als nicht zutreffend gewählt wurde. Wirth (2001) spricht in diesem Zusammenhang von dem Codierprozess durch die Codierenden als „gelenkte Rezeption“. Die Inklusion von Beispielen und Fallbeispielen macht schon deutlich, dass die Entwicklung des Codebuchs nicht nur deduktiv entlang des theoretischen Konstrukthintergrunds, sondern auch induktiv durch Zuhilfenahme des Medienmaterials geschieht. Dieser Ansatz des Zusammenspiels von deduktiver und induktiver Herangehensweise kann als „integrativ“ (Früh und Früh 2015) bezeichnet werden: Die Kategorienauswahl und -bildung wird theoriegeleitet vorgenommen, so dass die Validität der Messung gewährleistet ist. Durch Induktion werden die Kategorien dann kontextabhängig interpretiert und in codierbare Ausprägungen *übersetzt.* In welchem Verhältnis diese Ausprägungen zueinanderstehen, wird durch das Skalenniveau bestimmt: Nominale bzw. kategoriale Skalen lassen nur Aussagen über die Unterschiedlichkeit bzw. Gleichheit der codierten Ausprägungen zu (bspw. die Unterscheidung zwischen den Ausprägungen staatliche und nicht-staatliche Akteure der Variable Akteur). Ordinale Skalen erlauben hingegen Aussagen über ein Über- bzw. Unterordnungsverhältnis der Ausprägungen (bspw. die unterschiedliche Intensitätsstufen niedrig, mittel hoch der Variablen Personalisierung).

Die Art der ausgearbeiteten Variablen legt das Skalenniveau und damit auch weitere statistische Auswertungsmöglichkeiten fest. Bei einer Vielzahl der entwickelten

Variablen handelt es sich um formale und inhaltliche Kategorien, die die Inhalte klassifizieren (Rössler 2017). Somit ist das Skalenniveau in diesen Fällen kategorial bzw. nominal, was sowohl eine dichotome als auch polytome Klassifizierungen einschließt. Wird die Stärke eines Merkmals innerhalb des Inhalts mit codiert, dann muss die/der Codierende eine evaluative Codierung vornehmen, weil sie/er zwischen den einzelnen Stärkestufen abschätzen muss. Im Falle dieser Kategorien mit evaluativen Elementen liegt häufig eine Ordinalskala vor, wobei insbesondere dann eine genaue und präzise Erläuterung im Codebuch und eine gründliche Codierschulung vonnöten ist (Rössler 2017). Dies gilt auch für wertende Kategorien, wie bspw. die Codierung der Bewertung bestimmter politischer Akteure.

Anwendungsphase: Codierschulung & Hauptcodierung
Das so entwickelte Codebuch wird in der Testphase umfangreichen Prüfungen unterzogen: In einem ersten Schritt wird von den Forschenden in Pretests geprüft, ob die Ausprägungen der Kategorien erstens trennscharf, zweitens erschöpfend und drittens intersubjektiv nachvollziehbar sind. In dieser Phase wird das Codebuch noch einmal angepasst und mit weiteren Beispielen, Gegenbeispielen und Grenzfallbeschreibungen angereichert. Innerhalb der Testphase findet auch die Codierschulung der Codierenden statt. Die Codierschulung ist zentral für den Erfolg der Inhaltsanalyse. Forschende üben zusammen mit den Codierenden anhand von Medienmaterial die Codierung ein, besprechen problematische Beispiele und erweitern gegebenenfalls noch die Codieranweisungen und sogar die Ausprägungsliste. Innerhalb der Codierschulung finden auch erste unabhängige Codierungen und Reliabilitätstests statt. Die Ergebnisse dieser ersten Tests sind Grundlage für die Überarbeitung und Finalisierung des Codebuchs. Abschließend findet eine umfangreiche Reliabilitätsüberprüfung statt, bevor die Phase der Anwendung beginnt.

In der Phase der Hauptcodierung findet regelmäßig Rücksprache mit den Codierenden statt und auch die Reliabilität der Codierung sollte fortlaufend überprüft werden, um mögliche „Rückfälle" in Heuristiken frühzeitig zu bemerken (Wirth 2001). Die Inhaltsanalyse endet mit der Phase der Auswertung der Daten und der Darstellung der Ergebnisse. Wünschenswert und für die zukünftige Forschung zentral ist, dass möglichst genau dokumentiert wird, wie das Codebuch entwickelt wurde und wie erfolgreich die Codierung bezüglich der Fragen, ob tatsächlich gemessen wurde, was theoretisch interessierte (Validität) als auch, ob die Codierung unabhängig von der subjektiven Interpretation der CodiererInnen stattfand (Reliabilität), ausgefallen ist. Dies gelingt bspw. Russmann (2019), die praxisnah die Durchführung einer konkreten Inhaltsanalyse beschreibt.

4 Gütekriterien: Reliabilität & Validität

Die Reliabilitätsprüfung gehört mittlerweile zu den Standardprozeduren im Verlauf einer standardisierten, manuellen Inhaltsanalyse und wird von den Fachzeitschriften zunehmend gefordert (Rössler 2017). Wie aufgezeigt, ist in allen Definitionen der Inhaltsanalyse die intersubjektive Nachvollziehbarkeit der Messung wichtig, d. h., dass die Ergebnisse mit demselben Untersuchungsinstrument jederzeit reproduzierbar sein sollen und dies testet die Reliabilitätsprüfung. Es können nach Rössler (2017) drei Typen der Reliabilitätsmessung unterschieden werden: (1) Die *Intracoderreliabilität* betrifft die Übereinstimmung der Codierungen einer/s CodiererIn mit zeitlichem Abstand. (2) Die Prüfung der *Intercoderreliabilität* betrifft die Übereinstimmung zwischen zwei oder mehr CodiererInnen. (3) Die *ForscherInnen-CodiererInnen-Reliabilität* betrifft die Übereinstimmung der Codierung von ForscherIn und CodiererIn. Alle Reliabilitätsmessungen lassen sich mit Hilfe verschiedener Reliabilitätsmaße/-koeffizienten berechnen (Früh 2017). In der Vergangenheit wurde dafür häufig die sogenannte Holstiformel (Holsti 1969) genutzt. Andere häufig genutzte Reliabilitätskoeffizienten, mit unterschiedlichen Vor- und Nachteilen in Bezug auf Aussagekraft und Genauigkeit, sind bspw. Scotts Pi (Scott 1955), Cohens Kappa (Cohen 1960), Lotus coefficient (Fretwurst 2015) oder Krippendorff's Alpha (Krippendorf 2004). Ein Vergleich verschiedener Reliabilitätskoeffizienten leisten bspw. Früh (2017), Müller-Benedict (1997), Fretwurst (2015) und Krippendorff (2004). Wann welcher Koeffizient empfohlen wird, unterscheidet sich bspw. in Abhängigkeit von der Stichprobengröße, CodiererInnenanzahl, Verfügbarkeit einer Mastercodierung, Komplexität und Skalenniveaus der Variablen, Datenstruktur (bspw. Verteilung der Werte in einer Kategorie), gewünschte Genauigkeit und Strenge der Überprüfung, zeitliche Ressourcen (wegen der Berechnungskomplexität einiger Variablen), Rechenkapazität, sowie von den Standards im Fach und in Fachzeitschriften. Die Werte solcher Koeffizienten liegen zwischen 0 (keine Reliabilität) und 1 (perfekte Reliabilität). Der Reliabilitätswert sollte dabei in den Studien zumindest getrennt für formale und inhaltliche Variablen angegeben werden (Rössler 2017). Formale Variablen erfordern eine nahezu 100-%ige Reliabilität (Brosius et al. 2012). Bei inhaltlichen Variablen macht es in der Evaluation Sinn auch die Anzahl der Ausprägungen einer Kategorie, welche überhaupt zur Auswahl standen, zu berücksichtigen (Rössler 2017). Der kombinierte Reliabilitätskoeffizient aller Kategorien sagt dann etwas über die Güte des Codebuches, über die Sorgfalt der CodiererInnen, sowie etwas darüber aus, wie gut es gelungen ist, die CodiererInnen zu übereinstimmenden Codierungen anzuleiten (Brosius et al. 2012; Früh 2017).

Bei der Validitätsprüfung können nach Rössler (2017) vier Typen unterschieden werden (vgl. auch Krippendorf 2004): (1) Die *Analysequalität* lässt sich als einzige Quantifizieren. Sie ergibt sich aus der ForscherInnen-CodiererInnen-Reliabilität und gibt Auskunft darüber, wie gut der von der/m ForscherIn gemeinte Bedeutungsgehalt durch die CodiererInnen getroffen wurde. (2) Die *Inhaltsvalidität* betrifft die Vollständigkeit.

Die Forderung nach Vollständigkeit ist ein zentrales Kriterium für die Güte der gesamten Untersuchung und des Kategorienschemas, was sich anhand früherer Forschungsdesigns, Plausibilitäten, theoretischer Überlegungen und anderer Außenkriterien prüfen lässt (Brosius et al. 2012). (3) Die *Kriteriumsvalidität* benutzt zur Plausibilitätseinschätzung der Ergebnisse (die inferenzrelevanten Merkmale) der Inhaltsanalyse den Vergleich mit externen Quellen und vergleichbaren Erhebungen. Wenn das gleiche Konstrukt mit einem anderen Messinstrument gemessen wird, sollten übereinstimmende Ergebnisse generiert werden (Scheufele und Engelmann 2009); (4) Die *Inferenzvalidität* zielt auf die Gültigkeit der weitergehenden Schlussfolgerungen, welche mittels der Inhaltsanalyse getätigt werden, ab. Dazu sind meist auch externe Erhebungen mit einem anderen methodischen Zugriff erforderlich. Zu beachten ist bei der Validitätsprüfung im Allgemeinen, dass eine hohe Validität, die jeden kleinen Aspekt des theoretischen Konstruktes zu umfassen versucht, zu Lasten einer hohen Reliabilität geht (Brosius et al. 2012). Je detaillierter die Verschlüsselung wird, desto größer ist die Wahrscheinlichkeit einer hohen Fehlerquote bei der Codierung.

Als spezifisches Problem der Methode der manuellen Inhaltsanalyse, welches die Güte beeinflusst, wird von ForscherInnen die *Reaktivität* genannt (Rössler 2017; Scheufele und Engelmann 2009). Dabei ist nicht die Reaktivität des Untersuchungsmaterials gemeint, sondern der CodiererInnen. Diese haben bestimmte Vorstellungen, Einstellungen und Emotionen in Bezug auf Untersuchungsthemen und dies kann dazu führen, dass sie aufgrund subjektiver Interpretationsleistungen unterschiedlich codieren (Scheufele und Engelmann 2009; Wirth et al. 2015). Die Reaktivität sollte jedoch im besten Fall bei allen CodiererInnen gleich ausfallen, über die Zeit stabil bleiben und mit der von der/m ForscherIn erwarteten Reaktivität übereinstimmen (Degen 2015; Rössler 2017; Wirth et al. 2015). Die computerbasierte, methodische Weiterentwicklung der Inhaltsanalyse – die automatisierte Inhaltsanalyse – hat keine Probleme mit Reaktivität von Material oder menschlichen CodiererInnen (Früh 2017).

5 Zentrale Forschungsfragen, Designs & Analysegegenstände standardisierter Inhaltsanalysen

Kommunikationswissenschaftliche Inhaltsanalysen haben sich in der Vergangenheit hauptsächlich auf vier Bereiche konzentriert, denen auch in der Struktur des vorliegenden Handbuchs Rechnung getragen wird: journalistische Berichterstattung, fiktionale Inhalte, Inhalte von Kommunikatoren, sowie von NutzerInnen (Riffe et al., 2019). Untersuchungen von journalistischer Berichterstattung lassen sich verschiedenen Forschungsfeldern zuordnen, die im Folgenden kurz besprochen werden.

Ein großer Teil der Studien baut auf normativen Annahmen zur Rolle der Massenmedien in der Gesellschaft auf (McQuail 2013). Vor diesem Hintergrund beschäftigen sich viele Inhaltsanalysen mit Berichterstattungsstilen oder journalistischer Qualität bzw. Leistungsfähigkeit (siehe Kapitel zu Journalistic Reporting Styles und News

Performance in diesem Buch). Diese Studien untersuchen, inwiefern journalistische Medienangebote BürgerInnen mit Informationen versorgen, die eine Meinungsbildung in der demokratischen Gesellschaft ermöglichen. Weitere Studien in diesem Bereich untersuchen die Berichterstattung zu einzelnen Themengebieten, z. B. zu Wahlen, Gesundheit, oder Terrorismus. In diesen Untersuchungen geht es häufig um die Frage, wie die Themen dargestellt werden und welche Themenaspekte, Frames, Akteure, oder Meinungen in der Berichterstattung vorkommen.

Ein weiteres Forschungsfeld stellen Inhaltsanalysen zu fiktionalen Inhalten dar. Besonders hervorzuheben sind in diesem Bereich Studien zu Filmen, Satire-Sendungen und Online-Games. Untersucht werden in diesen Studien, ausgehend von Überlegungen zur Kultivierung von Einstellungen und Vorurteilen, häufig Stereotype oder Gewaltdarstellungen, die über solche Formate vermittelt werden.

Ein weiteres wichtiges Forschungsfeld stellt die strategische Kommunikation von politischen, zivil-gesellschaftlichen und wirtschaftlichen Akteuren dar. Studien in diesem Bereich beschäftigen sich mit der Frage, wie verschiedene Interessengruppen ihre Anliegen kommunizieren und welche kommunikativen Mittel sie einsetzen, um ihre Ziele zu erreichen. Im Fokus der Forschung steht unter anderem die Selbstdarstellung politischer Akteure, z. B. in sozialen Medien, oder Wahlkampagnen einzelner KandidatInnen oder Parteien. Des Weiteren beschäftigte sich die Forschung in jüngerer Zeit verstärkt mit populistischen Aussagen von PolitikerInnen und Desinformation. Daneben wird untersucht, wie beispielweise NGOs oder Interessengruppen versuchen, Themen zu setzen und auf ihre Themen aufmerksam zu machen. Auch die Kommunikation wirtschaftlicher Akteure wird in verschiedenen Studien untersucht, insbesondere im Hinblick auf PR und Werbung.

Im vergangenen Jahrzehnt hat sich die die Forschung auch zunehmend auf die Inhalte von NutzerInnen konzentriert. So gibt eine Vielzahl von Inhaltsanalysen, die Kommentare auf Nachrichtenwebsites analysiert. Neuere Studien nehmen vermehrt Kommentare in sozialen Medien in den Blick. In diesen Studien geht es vorrangig um die Frage, wie zivil NutzerInnen miteinander kommunizieren und ob sich Anzeichen für einen Deliberationsprozess finden lassen.

Zentrale Variablen, die in allen genannten Forschungsfeldern vorkommen, sind formale Variablen, wie Umfang oder Länge, Akteure, Themen und Tonalität. Formale Variablen umfassen bspw. den Zeitraum, das Medium, oder die Anzahl von *Likes* und *Shares* bei Social-Media-Inhalten. Beim Sampling über Datenbanken, wie LexisNexis oder Factiva, oder über die API-Schnittstellen von Plattformen, wie Facebook oder Twitter, werden solche formalen Variablen in der Regel automatisiert erfasst. Aufwendiger ist dagegen die Analyse von Akteuren und Themen. Diese zentralen Variablen kommen in einem Großteil der Studien aller Forschungsfelder vor und basieren meist auf Listen oder Diktionären. Sie unterscheiden sich je nach Themengebiet und werden daher in diesem Handbuch in einer Reihe thematischer Kapitel diskutiert. Eine weitere zentrale Variable ist Tonalität (häufig auch als Valenz bezeichnet). Diese Variable misst in der Regel, ob eine Person oder ein Thema positiv, negativ, oder neutral dargestellt wird.

In jüngerer Zeit kommen zur Messung von Tonalität bei großen Datenmengen vermehrt automatisierte Sentimentanalysen zum Einsatz.

Im letzten Jahrzehnt hat die Digitalisierung und die damit verbundenen Umbrüche die inhaltsanalytische Forschung in der Kommunikationswissenschaft geprägt. Wie die einzelnen Kapitel in diesem Handbuch zeigen, beschäftigt sich die aktuelle Forschung häufig mit diesen Veränderungen. Inhaltsanalysen werden derzeit häufig in Studien eingesetzt, die entweder den Wandel öffentlicher Kommunikation beschreiben und erklären, oder Phänomene untersuchen, die durch die Digitalisierung besondere Relevanz erhalten haben, wie z. B. NutzerInnenkommentare und digitale Anschlusskommunikation.

Studien, die sich mit dem Wandel beschäftigen, haben in der Regel ein Längsschnittdesign und untersuchen, wie sich öffentliche Kommunikation im Zeitverlauf verändert, bspw. durch die zunehmende Kommerzialisierung und Globalisierung. Oft werden zudem verschiedene Kanäle verglichen, etwa in Studien zu Wissenschaftskommunikation in Fernsehen, Zeitungen und auf Webseiten.

Studien mit einem ländervergleichenden Design analysieren dagegen oft Homogenisierungstendenzen in Nachrichteninhalten, die mit den veränderten Medienproduktions- und Nutzungsbedingungen begründet werden. Des Weiteren liegt in dieser Forschung ein Schwerpunkt auf der Identifikation von strukturellen Rahmenbedingungen, da diese Länderunterschiede in der öffentlichen Kommunikation bedingen (de Vreese et al. 2016).

In Zukunft ist die inhaltsanalytische Forschung vor allem mit dem Problem konfrontiert, eine ausreichende Codierquantität zu gewährleisten, auf deren Basis sich zuverlässige und valide Inferenzschlüsse ziehen lassen (Scharkow 2012). Textmengen in einer Größenordnung um zehntausend und mehr können nicht vollständig mit einer manuellen Inhaltsanalyse bearbeitet werden (Früh 2017). Da im Zusammenhang mit digitalen Inhalten häufig große Datenmengen anfallen, wird die manuelle Inhaltsanalyse immer häufiger mit automatisierten Verfahren kombiniert (Wettstein 2014), bspw. in Studien zu Inhalten in sozialen Medien. Solche Methodenkombination kommen bspw. in Studien zu NutzerInnenkommentaren und -reaktionen, Reputationsstudien, und Themenanalysen (z. B. im Wahlkampf) zum Einsatz. Derartige Weiterentwicklungen und Kombinationen machen die manuelle Inhaltsanalyse auch zukünftig zur einer der wichtigsten Methoden in der Kommunikationswissenschaft.

Literatur

Berelson, B. (1952). *Content analysis in communication research.* Glencoe: Free Press.

Brosius, H. B., Haas, A., & Koschel, F. (2012). *Methoden der empirischen Kommunikationsforschung. Eine Einführung.* Wiesbaden: Springer VS.

Cohen, J. (1960). A coefficient of agreement for nominal scales. *Educational and Psychological Measurement, 20*, 37-46.

de Vreese, C. H., Esser, F., & Hopmann, D. N. (2016). *Comparing political journalism.* London & New York: Routledge.

Degen, M. (2015). Codierer-Effekte in Inhaltsanalysen: Ein vernachlässigtes Forschungsfeld. In W. Wirth, K. Sommer, M. Wettstein, & J. Matthes (Hrsg.), *Qualitätskriterien in der Inhaltsanalyse* (S. 78–118). Köln: Halem.

Emmer, M., & Strippel, C. (2015). Stichprobenziehung für Online-Inhaltsanalysen: Suchmaschinen und Filter Bubbles. In A. Maireder, J. Ausserhofer, C. Schumann, & M. Taddicken (Hrsg.), *Digitale Methoden in der Kommunikationswissenschaft* (S. 275-300). Berlin: Böhland & Schremmer.

Fretwurst, B. (2015). Reliability and accuracy with Lotus. With commentary on calculating Lotus with SPSS. In W. Wirth, K. Sommer, M. Wettstein, & J. Matthes (Hrsg.), *Qualitätskriterien in der Inhaltsanalyse* (S. 176–203). Köln: Halem.

Früh, W. (1998/2017). *Inhaltsanalyse*. Konstanz: UVK Medien.

Früh, W. & Früh, H. (2015). Empirische Methoden in den Sozialwissenschaften und die Rolle der Inhaltsanalyse. Eine Analyse deutscher und internationaler Fachzeitschriften 2000–2009. In W. Wirth, K. Sommer, M. Wettstein, & J. Matthes (Hrsg.), *Qualitätskriterien in der Inhaltsanalyse* (S. 15–77). Köln: Halem.

Holsti, O. R. (1969). *Content analysis for the social sciences and humanities.* Reading: Addison-Wesley.

Jandura, G., Jandura, O., & Kuhlmann, C. (2005). Stichprobenziehung in der Inhaltsanalyse. Gegen den Mythos der künstlichen Woche. In V. Gehrau, B. Fretwurst, B. Krause, & G. Daschmann (Hrsg.). *Auswahlverfahren in der Kommunikationswissenschaft* (S. 71–116). Köln: Halem.

Karlsson, M., & Sjøvaag, H. (2015). Content Analysis and Online News. *Digital Journalism, 4*(1), 177–192.

Krippendorff, K. (2004). Reliability in content analysis: Some common misconceptions and recommendations. *Human Communication Research, 30*(3), 411–433.

Krippendorff, K. (2018). *Content analysis: An introduction to its methodology* (4th ed.). Thousand Oaks: Sage publications.

McMillan, S.J. (2000). The microscope and the moving target: The challenge of applying content analysis to the World Wide Web. *Journalism & Mass Communication Quarterly, 77*, 80–98.

McQuail, D. (2013). *Journalism and society.* London: SAGE.

Meier, S., Wünsch, C., Pentzold, C., & Welker, M. (2010). Auswahlverfahren für Online-Inhalte. In M. Welker, C. Wünsch (Hrsg.). *Die Online-Inhaltsanalyse Forschungsobjekt Internet* (S.103–123). Köln: Halem.

Merten, K. (1995). *Inhaltsanalyse. Einführung in Theorie, Methode und Praxis.* Opladen: Westdeutscher Verlag.

Müller-Benedict, V. (1997). *Der Einsatz von Maßzahlen der Interkoder-Reliabilität in der Inhaltsanalyse.* Abzurufen unter: https://nbn-resolving.org/urn:nbn:de:0168-ssoar-12596.

Riffe, D., Aust, C.F., & Lacy, S.R. (1993). The effectiveness of random, consecutive day and constructed week samples in newspaper content analysis. *Journalism Quarterly, 70*, 133–139.

Riffe, D., Lacy, S., Fico, F., & Watson, B. (2019). *Analyzing media messages: Using quantitative content analysis in research.* Routledge.

Rössler, P. (2017). *Inhaltsanalyse*. Konstanz: UVK.

Russmann, U. (2019). Using content analysis to explore negative user expressions on political parties' facebook pages. In SAGE Research Methods Cases. DOI: https://doi.org/10.4135/9781526469670

Scheufele, B. & Engelmann, I. (2009). *Empirische Kommunikationsforschung.* Konstanz: UVK.

Scharkow, M. (2012). *Automatische Inhaltsanalyse und maschinelles Lernen.* Berlin: epubli.

Schnell, R., Hill, P.B., Esser, E. (2018). *Methoden der empirischen Sozialforschung* (11. überarbeitete Auflage). Berlin: De Gruyter Oldenbourg.
Scott, W. (1955). Reliability of content analysis: The case of nominal scale coding. *Public Opinion Quarterly, 19*(3), 321-325.
Skalski, P. D., Neuendorf, K. A., & Cajigas, J. A. (2017). Content analysis in the interactive media age. In: Neuendorf, K.A. (ed.) *The content analysis guidebook*, 2 (S. 201-242). Thousand Oaks: Sage.
Sommer, K., Wettstein, M., Wirth, W., & Matthes, J. (Hrsg.) (2014). *Automatisierung in der Inhaltsanalyse.* Köln: Halem.
Welker, M., & Wünsch, C. (2010). *Die Online-Inhaltsanalyse. Forschungsobjekt Internet.* Köln: von Halem.
Wettstein, M. (2014). "Best of Both Worlds": Die halbautomatische Inhaltsanalyse. In K. Sommer, M. Wettstein, W. Wirth, Werner & J. Matthes (Hrsg.), *Automatisierung in der Inhaltsanalyse* (S. 16–39). Köln: Halem.
Wirth, W. (2001). Der Codierprozess als gelenkte Rezeption. Bausteine für eine Theorie des Codierens, In W. Wirth & E. Lauf (Hrsg.). *Inhaltsanalyse: Perspektiven, Probleme, Potentiale* (S. 157–182). Köln: Halem.
Wirth, W., Wettstein, M., Kühne, R. & Reichel, K. (2015). Theorie und Empirie des Codierens: Personelle und situative Einflussfaktoren auf Qualität und Quantität des Codierens bei der Inhaltsanalyse. In W. Wirth, K. Sommer, M. Wettstein, & J. Matthes (Hrsg.), *Qualitätskriterien in der Inhaltsanalyse* (S. 96–118). Köln: Halem.
Wolling, J. (2005). Normalzeit vs. Spezialzeit. Besondere Ereignisse als Problem der Stichprobenziehung bei Inhaltsanalysen von Medienangeboten. In V. Gehrau, B. Fretwurst, B. Krause, & G. Daschmann (Hrsg.). *Auswahlverfahren in der Kommunikationswissenschaft* (S. 138–157). Köln: Halem.

Dr. Sabrina Heike Kessler is a senior research and teaching associate at the Division of Science, Crisis, & Risk Communication of the Department of Communication and Media Research, University of Zurich (Switzerland). She holds a PhD in communication science from the Friedrich Schiller University Jena (Germany). Her research interests include science and health communication as well as online search and perception behavior. She tweets under @SabrinaKessler.

Dr. Katharina Sommer is a senior research associate at the Zurich University of Applied Sciences ZHAW. She holds a PhD in Communication Science from the University of Zurich. Her research focuses on the role of emotions and intergroup dynamics for media effects and on effects of advertising.

Prof. Dr. Edda Humprecht is a Associate Professor at the Norwegian University of Science and Technology (NTNU) and Senior Research and Teaching Associate at UZH. Her research focuses on disinformation, political news, and media systems.

Dr. Franziska Oehmer-Pedrazzi is a senior lecturer and researcher at the University of Applied Sciences of the Grisons. She holds a PhD in Communication Science from the University of Zurich and a Bachelor in Law. Her research interests include mediatization (of law), political communication and digital media governance.


cc
BY



Automated Content Analysis

Valerie Hase

1 Introduction

Due to the rise in processing power, advancements in machine learning (Grimmer et al. 2021), and the availability of large text corpora online, the use of computational methods including automated content analysis (van Atteveldt und Peng 2018) has rapidly increased. Automated content analysis is applied and developed across disciplines such as computer science, linguistics, political science, economics and – increasingly – communication science (Hase et al. 2022). Recent pieces offer theoretical introductions to the method (Benoit 2020; Boumans and Trilling 2016; DiMaggio 2015; Grimmer and Stewart 2013; Günther and Quandt 2016; Manning and Schütze 1999; Quinn et al. 2010; Scharkow 2012; van Atteveldt et al. 2019; Wettstein 2016; Wilkerson and Casas 2017). Similarly, tutorials on how to conduct such analyses are readily available online (Puschmann 2019; Silge and Robinson 2022; Watanabe and Müller 2021; Welbers et al. 2017; Wiedemann and Niekler 2017).

Automated content analysis or "text as data" methods describe an approach in which the analysis of text is, to some extent, automatically conducted by machines. While automated analyses for other types of content, for example images (Webb Williams et al. 2020), have also been proposed more recently, this study will focus on text. In contrast to manual coding, text is not read and understood as one unit, but automatically broken

V. Hase (✉)
Department of Media and Communication, LMU Munich, München, Deutschland
E-Mail: valerie.hase@ifkw.lmu.de

F. Oehmer-Pedrazzi et al. (Hrsg.), *Standardisierte Inhaltsanalyse in der Kommunikationswissenschaft – Standardized Content Analysis in Communication Research,* https://doi.org/10.1007/978-3-658-36179-2_3

down to its “features”, for example single words such as “she” or “say”. The complexity of texts is then reduced further by converting text to numbers: Texts are often understood based on how often different features, for example unique words, occur. Computers use feature occurrences as manifest indicators to infer latent properties from texts (Benoit 2020), for example negativity or emotions. Importantly, manual coding is still part of most automated analyses: Humans may construct dictionaries to automatically look up features expressing sentiment, code sentiment in texts as training data on which algorithms are trained, or create a gold standard of manually annotated texts against which the results of automated analyses are compared (Song et al. 2020; van Atteveldt et al. 2019).

When using text as data approaches, readers should bear in mind important caveats and limitations. Human decisions lie at the core of “automated” content analyses and thus necessarily introduce certain degrees of freedom to these approaches. For example, researchers have to decide how to prepare text for analyses (Denny and Spirling 2018) or choose a method to infer latent concepts of interest (Nelson et al. 2021), which can heavily impact results. Also, text as data approaches are costly: Not only does it take considerable effort to decide on how to conduct which steps of the analysis and write code to execute them. Studies often rely on large sets of manually annotated texts for the training or validation of algorithms, which require time and money for manual coders. As automated content analyses aim to infer latent concepts, researchers should also note that the method necessarily includes uncertainty and error: It cannot grasp texts in their full complexity, similar to manual coding (Grimmer and Stewart 2013). As Grimmer and Stewart (2013, p. 269, capitalization by authors) put it: “All Quantitative Models of Language Are Wrong – But Some Are Useful”.

Related to this, there is an ongoing debate about which variables can and should be measured automatically instead of relying on human coding (di Maggio 2015). It seems that the more complex the latent construct that should be inferred, the less suitable automated approaches. For example, formal features such as the use of hyperlinks in text (Günther and Scharkow 2014) or an article’s publication date (Buhl et al. 2019) are easily detected automatically. Text as data approaches can also identify events that are being reported on across articles (Trilling and van Hoof 2020) and, as such, news chains (Nicholls and Bright 2019). However, recent studies have cast doubt on the performance of automated analyses for grasping more complex variables at the core of communication studies: When measuring evaluations or sentiment, human coding clearly outperforms machines (van Atteveldt et al. 2021). Similarly, studies on automated measurements of frames (Nichols and Culpepper 2021) or media bias (Spinde et al. 2021) do not warrant optimism that text as data approaches are applicable for any kind of text or even better than human coding. Thus, automated approaches do not replace human abilities to understand text. Rather, they amplify them (Grimmer and Stewart 2013; Nelson et al. 2021), as do computational methods in general (van Atteveldt and Peng 2018).

Emerging trends in the field include approaches that try to better model syntactic relationships in texts, e.g., evaluations concerning a specific actor (Fogel-Dror et al. 2019). Others aim to more accurately grasp the semantic meanings of features through word embeddings (Mikolov et al. 2013; Pennington et al. 2014, but for a discussion of potential biases see Bolukbasi et al. 2016). Studies also propose mixed methods approaches where computational methods and manual coding support each other, often in an iterative process (Lewis et al. 2013; Nelson 2020). Recently, semi-automated methods in which manual input is used as a starting point have emerged (Watanabe 2021). Studies have also introduced new ways of resourceful and cheap data collection such as crowdsourcing (Lind et al. 2017).

2 Common steps of analysis and research designs

Automated content analysis typically consists of the following four steps (Wilkerson and Casas 2017): (1) data collection, (2) data preprocessing, (3) data analysis, and (4) data validation.

(1) *Data collection*. First, large text corpora need to be obtained through structured databases such as Lexis Uni or other third party providers, Application Programming Interfaces (APIs) for data from social networks or newspapers, or by scraping websites (Possler et al. 2019; van Atteveldt et al. 2019). The collection of large amounts of textual data often involves legal problems due to copyright issues (Fuchsloch et al. 2019).

(2) *Data preprocessing*. In what is called preprocessing, texts are then prepared for automated analysis. Potential units of analysis might be whole articles/social media messages, but also single paragraphs or sentences. Preprocessing reduces text units to those features that are informative for detecting differences or similarities between different text units and dismisses features that are not. In every study, researchers have to decide which parts of text are informative and hence which of the following steps are important for their analysis. Not only are there no standard preprocessing steps (Benoit 2020) but the choice of preprocessing steps influences results (Denny and Spirling 2018; Scharkow 2012). Common steps include (1) the removal of boilerplate, for example URLS included in texts obtained via scraping. Next, (2) tokenization, where text is broken down to its features, is important. Oftentimes, these features are unigrams, i.e., single words, such as “he” or “and” in what is called a “bag-of-words” approach: The order or context of words is not taken into account. In “bag-of-word” approaches, the occurrence of a feature is what counts, independent of where in a given text the feature occurs or which features occur in close proximity to it (van Atteveldt et al. 2019). However, there are more informative ways of feature extraction than unigrams: Stoll, Ziegele and Quiring (2020), for example, include n-grams. These may describe bigrams, i.e., an order of two words, such as “he walks”, or trigrams, i.e., an order of three words, such as “and then he”. More meaningful n-grams are collocations, i.e., specific words that often co-occur and, in conjunction, have a different meaning. Statistically checking

for words that frequently co-occur or using Named Entity Recognition (NER), where names for persons, organizations or organizations are automatically detected, would for example lead to the unigrams "United" and "States" to be included as one feature, namely the collocation "United States". Some analyses also distinguish several meanings a feature may have through Part-of-Speech (PoS) tagging. For example, "novel" as a noun and "novel" as an adjective describe two very different things (Manning and Schütze 1999). Further preprocessing steps might include discarding punctuation (3) and capitalization (4). In addition, (5) features with little informative values are often deleted. Depending on the research question, these might include numbers, so-called "stop words" (often based on ready-made lists, including for example "and", "the"), or features occurring in almost every or almost no text in what is called relative pruning. Lastly, many analyses try to reduce complexity through (6) stemming or lemmatizing (the feature "analyzed", for example, becomes "analyz" with stemming and "analyze" with lemmatizing). In "bag-of-words" approaches, texts are finally (7) represented in a document-feature-matrix where rows identify the unit of analysis (e.g., an article, a paragraph, a sentence) and columns identify how often a feature occurs in this unit (e.g., how often the unigram "terrorist" occurs in the first, the second unit and so forth).

(3) *Data analysis*. While recent overviews have used various systematizations for different methods in the field of automated content analysis, many distinguish between (1) dictionary and rule-based approaches, (2) supervised machine learning, and (3) unsupervised machine learning. While (1) and (2) include deductive approaches where known categories are assigned to texts, (3) is more inductive as it explores unknown categories (Boumans and Trilling 2016; Grimmer and Stewart 2013; Günther and Quandt 2016).

Deductive Approaches: Assigning known categories to text

(a) Dictionary and rules-based approaches often simply count the occurrence of features. Studies for example analyze whether news coverage of Islam mentions the feature "terrorism" (Hoewe and Bowe 2021). More complex studies use feature lists, also called dictionaries, to look up uncivil expressions (Muddiman et al. 2019) or topics in texts (Guo et al. 2016). Two kinds of dictionaries need to be differentiated: "Off-the-shelf" dictionaries such as the General Inquirer (Stone et al. 1966) or the Linguistic Inquiry and Word Count LIWC (Tausczik and Pennebaker 2010) are ready-made dictionaries developed to be applied across text genres or topics. As Taboada (2016) cautions researchers, many "off-the-shelf" dictionaries were developed based on specific genres and topics, namely user reviews of consumer products. Research shows a lack of agreement between different "off-the-shelf" dictionaries and for their results to differ from manual coding (Boukes et al. 2020; van Atteveldt et al., 2021). For sentiment analysis, Boukes et al. (2020, p. 98) therefore stress that "scholars should be conscious of the weak performance of the off-the-shelf sentiment analysis tools". In contrast, "organic" dictionaries are inductively developed feature lists used to deductively assign known categories such as sentiment or topics to text units. As they are developed related

to the research question and the corpus at hand, they are tailored for a specific genre (e.g., social media texts or news articles), topic (e.g., texts concerning climate change or economic development), and concept of interest (e.g., negative sentiment or incivility). Although the construction of "organic" dictionaries is quite demanding, they oftentimes offer better results and should be preferred over "off-the-shelf" dictionaries (Boukes et al. 2020; Muddiman et al. 2019). However, both types of dictionaries still have general pitfalls in that they cannot easily handle negation, irony or polysemy, meaning that the same feature might have a completely different meaning depending on its context (Benoit 2020). They are also often tailored to English-language only (Lind et al. 2019).

(b) *Supervised machine learning* uses manually annotated training data from which classifiers learn how to categorize previously unknown data. The method is for example applied to classify texts concerning their topics (Scharkow 2012) or whether or not they contain incivility (Stoll et al. 2020). First, variables are coded by human coders to create a training data set. Next, classifiers use this training data to learn which independent variables (for example, the frequency of features such as "bad" and "catastrophe") predict the dependent variable (for example, negative sentiment). They then predict sentiment classifications for a previously unknown set of test data, i.e., texts researchers want to classify automatically (for a detailed overview of analysis steps see Barberá et al. 2021; Mirończuk and Protasiewicz 2018; Pilny et al. 2019). There is a plethora of classifiers that can be used, for example the Naive Bayes Classifier or Support Vector Machines (Scharkow 2012). Different classifiers can also be combined to ensembles. Supervised machine learning is not without limitations: Not only does the training data need to be of sufficient size, which can often mean that a considerable number of texts have to be coded manually. Researchers should also be cautious of strong dependencies of the classifier on the training data set, meaning the classifier works well for training data but poorly for test data. To avoid this, researchers often apply k-fold cross validation where the corpus is split into k groups. Then, each group is used as the test data once while the rest of the groups are used as training data without any overlaps between training and test data sets (Manning and Schütze 1999). Researchers should also test how generalizable their classifier is across contexts, meaning if it can accurately predict categories for new data with slightly different topics or text genres (Burscher et al. 2015).

Inductive Approaches: Exploring unknown categories in text

(c) *Unsupervised machine learning* takes a more inductive "bottom-up" approach as, in contrast to the previous approaches, categories are not previously known or fed to the model as training data. Instead, they are induced from the corpus (Boumans and Trilling 2016). If one is interested in categorizing texts concerning their main topics, for example, and has no assumptions as to which topics exist, unsupervised machine learning would be suitable.

The most prominent unsupervised machine learning approach is topic modeling (Blei et al. 2003). As a method to identify topics (Maier et al. 2018) and, as some argue, in combination with other methods even frames (Walter and Ophir 2019, but see Nicholls

and Culpepper 2021), the method has been of increasing interest. Topic modeling identifies the relative prevalence of topics in texts based on word co-occurrences. It assumes that documents can be represented as mixture of different latent topics that are themselves characterized by a distribution over words (Blei et al. 2003; Maier et al. 2018). In contrast to single-membership models such as k-means clustering (Grimmer and Stewart 2013), topic modeling therefore allows for multiple topics to occur in a text. Recent applications such as structural topic modeling also enable researchers to analyze how covariates – for example the year a text was published or its author – influence topic prevalence or its content (Roberts et al. 2014). While some settings such as the number of topics to be estimated need to be specified before running the model, topics themselves are generated without human supervision. While less resources have to be put towards running the model, testing the reliability and validity of results produced by unsupervised machine learning can be quite demanding. In the case of topic modeling, researchers should, for example, check how results vary when estimating different numbers of topics, whether topics are robust and reproducible across model runs, and whether they are coherent and meaningful (Maier et al. 2018; Roberts et al. 2016; Wilkerson and Casas 2017). In particular, choosing the number of topics the model should identify is a highly subjective process that will likely influence results.

(4) *Data validation*. One should not blindly trust the results of any automated method. Therefore, validation is a necessary step (Grimmer and Stewart 2013). For more deductive approaches such as dictionaries and supervised machine learning, validation is relatively straightforward: Researchers already know which categories of interest, for example negative sentiment, might be found. Hence, validity is reassured by comparing automated results, i.e., which texts were assigned which sentiment, to a benchmark. Oftentimes, this benchmark is manually annotated data as a gold standard, here describing which sentiment humans would assign. While this gold standard not necessarily implies the "true" value as human coding is quite erroneous (DiMaggio 2015) even if intercoder reliability is reassured, it indicates on what humans would *agree* for a text to be the "true" sentiment.

The most frequently reported indices for the validity of automated analyses are precision and recall (Song et al. 2020). *Precision* indicates how many articles predicted to contain negative sentiment according to the automated analysis actually contain negative sentiment according to the manual benchmark: How good is the model at not creating too many false positives? For example, a value of .8 implies that 80 % of all articles that do contain negative sentiment according to the automated classification actually contain negative sentiment according to the manual benchmark. However, 20 % were misclassified as containing negative sentiment and do, in fact, not. *Recall* indicates how many articles that actually contain negative sentiment were found: How good is our model at not creating too many false negatives? For example, a value of .8 implies that 80 % of all articles with negative sentiment were found by the automated approach. However, 20 % were not because they had been misclassified as not containing negative sentiment when they in fact did (Manning and Schütze 1999). However, many studies do not yet report

such validity tests (Song et al. 2020). Clear thresholds for what constitutes satisfactory values for these indices have not yet been agreed upon either – in contrast to intercoder reliability values for manual content analysis. Validity tests are also not very informative if results are unbalanced, meaning some categories – such as negative sentiment – have few true positives or true negatives. Given the uncertainty of quality thresholds, the question of “how good is good enough” (van Atteveldt 2008, p. 208) is still up for discussion.

The validation of unsupervised models is less direct. While studies argue that topic models, for example, can be validated by manually checking whether topics are coherent (Quinn et al. 2010) and can be differentiated from other topics (Chang et al. 2009, see Grimmer and Stewart 2013 for other approaches), there are no clear thresholds for what constitutes a valid model. Also, validity tests are reported even less often. Another issue are concerns about the reliability of these models. As Wilkerson and Casas (2017) summarize, unsupervised approaches are often instable, meaning that repeated estimations or different starting values lead to different results.

3 Analytical constructs employed in automated content analysis

Due to the interdisciplinarity of the method, automated content analysis has been used to measure a variety of constructs. For the field of communication science, studies often focus on four constructs of interest (see similarly Boczek and Hase 2020):

1. **Actors:** Many studies in the field of communication science use manual analysis to analyze how often actors, e.g., politicians or parties, are mentioned in texts (Vos and van Aelst 2018). Automated content analysis might be of massive help in this context. The recognition of so-called “named entities” (NER), including persons, organizations, or locations, has a long tradition in computer science. While different approaches have been discussed and the correct recognition of named entities is not yet solved (Marrero et al. 2013), studies have introduced potential approaches to our field. Recent analyses for example use rule-based approaches and dictionaries (Lind and Meltzer 2021; van Atteveldt 2008), machine learning (Burggraaff and Trilling 2020), or combinations of these methods (Fogel-Dror et al. 2019) to automatically classify named entities and often entity-related sentiment in text. This already indicates why these approaches might be of interest: Not only can we automatically count names of entities mentioned in text. We can also measure how different entities relate to each other, e.g., who talks about whom (van Atteveldt 2008), and sentiment concerning specific actors, e.g., how an entity is evaluated (Fogel-Dror et al. 2019).

2. **Sentiment or Tone:** Many studies are interested less in entity-related sentiment and more in the general sentiment or tone of news, for example for economic (Boukes et al. 2020) or political coverage (Young and Soroka 2012). A plethora of overview articles deliver introductions to such approaches which are often discussed in the context of sentiment analysis (Stine 2019; Taboada 2016). Sentiment analysis has developed from relying on dictionaries to using machine learning to applying deep learning and neural networks. Stine (2019) shows that the method delivered better performances with each turn in methods: While off-the-shelf dictionaries deliver insufficient results (Boukes et al. 2020) and organic dictionaries tailored to the genre, topic and concept of interest in one's study are recommended instead (Muddiman et al. 2019), supervised approaches seem to offer better results than at least off-the-shelf dictionaries (Barberá et al. 2021; González-Bailón and Paltoglou 2015). However, artificial neural networks can also be a suitable approach, especially for unbalanced data (Moraes et al. 2013; Stine 2019) and have already been applied in communication science (Rudkowsky et al. 2018). In sum, machine learning approaches in general might be better suited to analyze sentiment than dictionaries (Barberá et al. 2021). However, almost all of these methods still fall short of human coding (van Atteveldt et al. 2021).
3. **Topics:** Many analyses are interested in topics, i.e., what is being talked about in texts. A plethora of methods has been applied to analyze topics: Many studies use supervised machine learning in the form of topic modeling (Blei et al. 2003; Maier et al. 2018; Quinn et al. 2010) while others have applied supervised machine learning (Burscher et al. 2015; Scharkow 2012) or dictionaries (Guo et al. 2016). Related to these studies, Trilling and van Hoof (2021) have proposed and compared different methods to detect events in text**.** While dictionaries seem to perform slightly worse than unsupervised machine learning (Guo et al. 2016), choosing a suitable method depends more on whether researchers already know which topics may appear (Grimmer and Stewart 2013). Supervised learning or dictionaries are more appropiate if a study is interested in identifying a set of predetermined topics. If these are unknown, (structural) topic modeling may be a better fit (Roberts et al. 2014).
4. **Frames:** Lastly, many communication scholars are interested not only in what is being talked about in texts but also how issues are being talked about, in particular framing as the selection and salience of specific aspects (Entman 1993). Recent studies have tried to detect frames based on computational methods, mostly by analyzing topics using unsupervised machine learning. They then map similar topics to overarching frames using network analysis and community detection algorithms (Walter and Ophir 2019) or cluster analysis (van der Meer et al. 2019) in a second step. Others have applied supervised machine learning (Burscher et al. 2014) or compared a range of methods (Nicholls and Culpepper 2021). However, researchers should refrain from presuming that constructs identified through computational methods can (always) be called frames, especially based on unsupervised approaches (Nicholls and Culpepper 2021; van Atteveldt et al. 2014).

4 Research desiderata

Automated content analysis has gained in importance across disciplines, including communication science. In pace with rising computational power, it has transformed the ways in which we think about and approach analyses of text. However, standards for how to conduct these analyses are still evolving. Moreover, which method and analyses steps are most suitable for a specific study depends on the data and research question at hand (Grimmer and Stewart 2013). In reality, the availability of computational power, manually annotated data or a researchers' coding and statistical knowledge often influence such choices. Many departments in the field of communication science do not yet offer courses on statistics or programming that are necessary for communication scientists to fully understand and apply these methods (Boczek and Hase 2020).

Furthermore, the lack of available methods outside of bag-of-word approaches represents a research desideratum. Especially when dealing with more complex questions above and beyond how often a certain word or actor is mentioned in a given text, for example relationships between actors, studies need to more strongly consider syntactic relationships. Approaches for this have already been proposed (Fogel-Dror et al. 2019; van Atteveldt 2008), but most analyses still rely on the quite unrealistic "bag-of-words" assumption.

Another ongoing issue are concerns about the reliability and validity of computational methods (Nelson 2019), which are often neither tested nor reported. Uncertainty and error are an inherent part of automated analyses, similar to manual content where intercoder reliability reflects disagreement between individual coders. Given that studies using manual content analysis almost always need to report intercoder values for publication, similar thresholds for what constitutes a reliable and valid automated content analysis should be developed and be made mandatory for publication of automated analyses. Also, when deciding between manual and automated approaches, innovativeness should not outweigh the reliability and validity of results. While computational methods are often seen as a (methodological) advancement, they still have to satisfy essential validity and reliability thresholds for scholars to trust their results. In conclusion: Researchers should not choose computational methods over existing approaches simply because they seem more innovative.

The biggest question, however, is as follows: Even if we measure latent constructs such as topics, frames, or sentiment through automated content analysis – do we actually capture things that are relevant for theories and frameworks within communication science? Take topic modeling: There is an ongoing discussion about what topics mean (Maier et al. 2018). Are topics simply issues discussed in the news (van Atteveldt et al. 2014) or, if clustered, may they be interpreted as frames (Walter and Ophir 2019)? In other words, what do we gain by measuring topics in the news? Among other things, the shift to computational social science brings forward rigorous demands not only for statistical analysis or research designs but theory building (Peng et al. 2019). And while computational methods may inspire such (Waldherr et al. 2021), the status quo

leaves further fruit of thought not only for methodological advances, but also for how computational methods might change existing and push new theories in communication science.

Relevant Variables in DOCA – Database of Variables for Content Analysis

Frames: https://doi.org/10.34778/1c
Actors: https://doi.org/10.34778/1b
Sentiment/tone: https://doi.org/10.34778/1d
Topics: https://doi.org/10.34778/1e

References

Barberá, P., Bodystun, A. E., Linn, S., McMahon, R., & Nagler, J. (2021). Automated text classification of news articles: A practical guide. *Political Analysis*, *29*(1), 19–42.

Benoit, K. (2020). Text as data: An overview. In L. Curini & R. Franzese (Eds.), *The SAGE handbook of research methods in political science and international relations* (pp. 461–497). London: Sage.

Blei D.M., Ng A.Y., & Jordan, M.I. (2003). Latent dirichlet allocation. *Journal of Machine Learning Research,* 3, 993–1022.

Boczek, K., & Hase, V. (2020). Technische Innovation, theoretische Sackgasse? Chancen und Grenzen der automatisierten Inhaltsanalyse in Lehre und Forschung. In J. Schützeneder, K. Meier, & N. Springer (Eds.), Neujustierung der Journalistik/Journalismusforschung in der digitalen Gesellschaft: Proceedings zur Jahrestagung der Fachgruppe Journalistik/Journalismusforschung der Deutschen Gesellschaft für Publizistik- und Kommunikationswissenschaft 2019, Eichstätt (pp. 117–128). doi:https://doi.org/10.21241/ssoar.70828.

Bolukbasi, T., Chang, K.-W., Zou, J., Saligrama, V., & Kalai, A (2016). Quantifying and reducing stereotypes in word embeddings. Retrieved from: https://arxiv.org/abs/1606.06121.

Boukes, M., van de Velde, B., Araujo, T., & Vliegenthart, R. (2020). What's the tone? Easy doesn't do it: Analyzing performance and agreement between off-the-shelf sentiment analysis tools. *Communication Methods and Measures*, *14*(2), 83–104.

Boumans, J. W., & Trilling, D. (2016). Taking stock of the toolkit: An overview of relevant automated content analysis approaches and techniques for digital journalism scholars. *Digital Journalism*, *4*(1), 8–23.

Buhl, F., Günther, E., & Quandt, T. (2019). Bad news travels fastest: A computational approach to predictors of immediacy in digital journalism ecosystems. *Digital Journalism*, *7*(7), 910–931.

Burggraaff, C., & Trilling, D. (2020). Through a different gate: An automated content analysis of how online news and print news differ. *Journalism*, *21*(1), 112–129.

Burscher, B., Odijk, D., Vliegenthart, R., de Rijke, M., de Vreese, C.H. (2014). Teaching the computer to code frames in news: Comparing two supervised machine learning approaches to frame analysis. *Communication Methods and Measures, 8*(3), 190–206.

Burscher, B., Vliegenthart, R., & de Vreese, C. H. (2015). Using supervised machine learning to code policy issues: can classifiers generalize across contexts? *The ANNALS of the American Academy of Political and Social Science*, *659*(1), 122–131.

Chang, J., Boyd-Graber, J., Wang, C., Gerrish, S., & Blei, D. M. (2009). Reading tea leaves: how humans interpret topic models. Paper presented at the *Neural Information Processing Systems*

2009. Retrieved from https://papers.nips.cc/paper/3700-reading-tea-leaves-how-humans-interpret-topic-models.pdf.
Denny, M. J., & Spirling, A. (2018). Text preprocessing for unsupervised learning: Why it matters, when it misleads, and what to do about it. *Political Analysis*, *26*(2), 168–189.
DiMaggio, P. (2015). Adapting computational text analysis to social science (and vice versa). *Big Data & Society*, *2*(2), 1–5.
Entman, R. M. (1993). Framing: Toward clarification of a fractured paradigm. *Journal of Communication, 43*(4), 51–58.
Fogel-Dror, Y., Shenhav, S. R., Sheafer, T., & van Atteveldt, W. (2019). Role-based association of verbs, actions, and sentiments with entities in political discourse. *Communication Methods and Measures*, *13*(2), 69–82.
Fuchsloch, S., von Nordheim, G., & Boczek, K. (2019). Unlocking digitized public spheres: Research opportunities and legal challenges in the use of text mining for content analysis. In C. Peter, T. K. Naab, & R. Kühne (Eds.), *Measuring media use and exposure: Recent developments and challenges* (Vol. 14, pp. 266–296). Cologne: Herbert von Halem Verlag.
González-Bailón, S., & Paltoglou, G. (2015). Signals of public opinion in online communication: A comparison of methods and data sources. *The ANNALS of the American Academy of Political and Social Science*, *659*(1), 95–107.
Grimmer, J., Roberts, M. E., & Stewart, B. M. (2021). Machine learning for social science: An agnostic approach. *Annual Review of Political Science*, *24*(1), 395–491.
Grimmer, J., & Stewart, B. M. (2013). Text as data: The promise and pitfalls of automatic content analysis methods for political texts. *Political Analysis*, *21*(3), 267–297.
Günther, E., & Scharkow, M. (2014). Recycled media. An automated evaluation of news outlets in the twenty-first century. *Digital Journalism*, *2*(4), 524–541.
Günther, E., & Quandt, T. (2016). Word counts and topic models: Automated text analysis methods for digital journalism research. *Digital Journalism*, *4*(1), 75–88.
Guo, L., Vargo, C. J., Pan, Z., Ding, W., & Ishwar, P. (2016). Big social data analytics in journalism and mass communication: Comparing dictionary-based text analysis and unsupervised topic modeling. *Journalism & Mass Communication Quarterly*, *93*(2), 332–359.
Hase, V., Mahl, D., & Schäfer, M.S. (2022). Der „Computational Turn“: ein „interdisziplinärer Turn“? Ein systematischer Überblick zur Nutzung der automatisierten Inhaltsanalyse in der Journalismusforschung. *Medien & Kommunikationswissenschaft, 70*(1–2), 60–78.
Hoewe, J., & Bowe, B. J. (2021). Magic words or talking point? The framing of ‘radical Islam’ in news coverage and its effects. *Journalism*, *22*(4), 1012–1030.
Lewis, S. C., Zamith, Rodrigo, & Hermida, A. (2013). Content analysis in an era of big data: A hybrid approach to computational and manual methods. *Journal of Broadcasting & Electronic Media, 57*(1), 34–52.
Lind, F., Eberl, J.-M., Heidenreich, T., & Boomgarden, H.G. (2019). When the journey is as important as the goal: A roadmap to multilingual dictionary construction. *The International Journal of Communication, 13,* 4000–4020.
Lind, F., Gruber, M., & Boomgaarden, H. G. (2017). Content analysis by the crowd: Assessing the usability of crowdsourcing for coding latent constructs. *Communication Methods and Measures*, *11*(3), 191–209.
Lind, F., & Meltzer, C. E. (2021). Now you see me, now you don’t: Applying automated content analysis to track migrant women’s salience in German news. *Feminist Media Studies, 21*(6), 923–940.
Maier, D., Waldherr, A., Miltner, P., Wiedemann, G., Niekler, A., Keinert, A., Pfetsch, B., Heyer, G., Reber, U., Häussler, T., Schmid-Petri, H., & Adam, S. (2018). Applying LDA topic modeling in communication research: Toward a valid and reliable methodology. *Communication Methods and Measures*, *12*(2–3), 93–118.

Manning, C. D., & Schütze, H. (1999). *Foundations of statistical natural language processing*. Cambridge: MIT Press.

Marrero, M., Urbano, J., Sánchez-Cuadrado, S., Morato, J., & Gómez-Berbís, J. M. (2013). Named entity recognition: Fallacies, challenges and opportunities. *Computer Standards & Interfaces*, *35*(5), 482–489.

Mikolov, T., Chen, K., Corrado, G., & Dean, J. (2013). Efficient estimation of word representations in vector space. Retrieved from http://arxiv.org/abs/1301.3781.

Mirończuk, M. M., & Protasiewicz, J. (2018). A recent overview of the state-of-the-art elements of text classification. *Expert Systems with Applications*, *106*, 36–54.

Moraes, R., Valiati, J. F., & Gavião Neto, W. P. (2013). Document-level sentiment classification: An empirical comparison between SVM and ANN. *Expert Systems with Applications*, *40*(2), 621–633.

Muddiman, A., McGregor, S. C., & Stroud, N. J. (2019). (Re)claiming our expertise: Parsing large text corpora with manually validated and organic dictionaries. *Political Communication*, *36*(2), 214–226.

Nelson, L. K. (2020). Computational grounded theory: A methodological framework. *Sociological Methods & Research*, *49*(1), 3–42.

Nelson, L. K. (2019). To measure meaning in big data, don't give me a map, give me transparency and reproducibility. *Sociological Methodology*, *49*(1), 139–143.

Nelson, L. K., Burk, D., Knudsen, M., & McCall, L. (2021). The future of coding: A comparison of hand-coding and three types of computer-assisted text analysis methods. *Sociological Methods & Research*, *50*(1), 202–237.

Nicholls, T., & Bright, J. (2019). Understanding news story chains using information retrieval and network clustering techniques. *Communication Methods and Measures*, *13*(1), 43–59.

Nicholls, T., & Culpepper, P.D. (2021). Computational identification of media frames: Strengths, weaknesses, and opportunities. *Political Communication*, *38*(1–2), 159–181.

Niekler, A., & Wiedemann, G. (2019). *Text mining for humanists and social scientists in R*. Retrieved from https://tm4ss.github.io/docs/index.html.

Peng, T.-Q., Liang, H., & Zhu, J. J. H. (2019). Introducing computational social science for Asia-Pacific communication research. *Asian Journal of Communication*, *29*(3), 205–216.

Pennington, J., Socher, R., & Manning, C. (2014). GloVe: Global vectors for word representation. Retrieved via https://nlp.stanford.edu/projects/glove/.

Pilny, A., McAninch, K., Slone, A., & Moore, K. (2019). Using supervised machine learning in automated content analysis: An example using relational uncertainty. *Communication Methods and Measures*, *13*(4), 287–304.

Possler, D., Bruns, S., & Niemann-Lenz, J. (2019). Data is the new oil – but how do we drill it? Pathways to access and acquire large data sets in communication science. *The International Journal of Communication, 13*, 3894–3911.

Puschmann, C. (2019). *Automatisierte Inhaltsanalyse mit R*. Retrieved from http://inhaltsanalyse-mit-r.de.

Quinn, K. M., Monroe, B. L., Colaresi, M., Crespin, M. H., & Radev, D. R. (2010). How to analyze political attention with minimal assumptions and costs. *American Journal of Political Science*, *54*(1), 209–228.

Roberts, M. E., Stewart, B. M., & Tingley, D. (2016). Navigating the local modes of big data: The case of topic models. In R. M. Alvarez (Ed.), *Computational Social Science* (pp. 51–97). Cambridge: Cambridge University Press.

Roberts, M. E., Stewart, B. M., Tingley, D., Lucas, C., Leder-Luis, J., Gadarian, S. K., Albertson, B., & Rand, D. G. (2014). Structural topic models for open-ended survey responses. *American Journal of Political Science*, *58*(4), 1064–1082.

Rudkowsky, E., Haselmayer, M., Wastian, M., Jenny, M., Emrich, Š., & Sedlmair, M. (2018). More than bags of words: Sentiment analysis with word embeddings. *Communication Methods and Measures*, *12*(2–3), 140–157.

Scharkow, M. (2012). *Automatische Inhaltsanalyse und maschinelles Lernen*. Berlin: epubli.

Silge, J., & Robinson, D. (2022). *Text mining with R*. Retrieved from https://www.tidytextmining.com.

Song, H., Tolochko, P., Eberl, J.-M., Eisele, O., Greussing, E., Heidenreich, T., Lind, F., Galyga, S., & Boomgarden, H. G. (2020). In validations we trust? The impact of imperfect human annotations as a gold standard on the quality of validation of automated content analysis. *Political Communication*, *37*(4), 550–572.

Spinde, T., Rudnitckaia, L., Mitrović, J., Hamborg, F., Granitzer, M., Gipp, B., Donnay, K. (2021): Automated identification of bias inducing words in news articles using linguistic and context-oriented features. *Information Processing & Management*, *58*(3), 102505.

Stine, R. A. (2019). Sentiment analysis. *Annual Review of Statistics and Its Application*, *6*, 287–308.

Stoll, A., Ziegele, M., & Quiring, O. (2020). Detecting impoliteness and incivility in online discussions. Classification approaches for german user comments. *Computational Communication Research*, *2*(1), 109–134.

Stone, P. J., Dunphy, D. J., & Smith, M. S. (1966). *The general inquirer: A computer approach to content analysis*. Cambridge: M.I.T. Press.

Taboada, M. (2016). Sentiment analysis: An overview from linguistics. *Annual Review of Linguistics*, *2*, 325–347.

Tausczik, Y. R., & Pennebaker, J. W. (2010). The psychological meaning of words: LIWC and computerized text analysis methods. *Journal of Language and Social Psychology*, *29*(1), 24–54.

Trilling, D., & van Hoof, M. (2020). Between article and topic: News events as level of analysis and their computational identification. *Digital Journalism, 8*(10), 1317–1337.

van Atteveldt, W. (2008). *Semantic network analysis: Techniques for extracting, representing and querying media content*. Charleston: BookSurge.

van Atteveldt, W., & Peng, T.-Q. (2018). When communication meets computation: Opportunities, challenges, and pitfalls in computational communication science. *Communication Methods and Measures*, *12*(2–3), 81–92.

van Atteveldt, W., van der Velden, M. A. C. G., & Boukes, M. (2021). The validity of sentiment analysis: Comparing manual annotation, crowd-coding, dictionary approaches, and machine learning algorithms. *Communication Methods and Measures*, *15*(2), 121–140.

van Atteveldt, W., Welbers, K., Jacobi, C., & Vliegenthart, R. (2014). *LDA models topics... But what are 'topics'?* Retrieved from http://vanatteveldt.com/wp-content/uploads/2014_vanatteveldt_glasgowbigdata_topics.pdf.

van Atteveldt, W., Welbers, K., & van der Velden, M. (2019). Studying political decision making with automatic text analysis. In W. R. Thompson (Ed.), *Oxford Research Encyclopedia of Politics*. Oxford University Press.

van der Meer, T. G. L. A., Kroon, A. C., Verhoeven, P., & Jonkman, J. (2019). Mediatization and the disproportionate attention to negative news: The case of airplane crashes. *Journalism Studies*, *20*(6), 783–803.

Vos, D., & van Aelst, P. (2018). Does the political system determine media visibility of politicians? A comparative analysis of political functions in the news in sixteen countries. *Political Communication*, *35*(3), 371–392.

Waldherr, A., Geise, S., Mahrt, M., Katzenbach, C., & Nuernbergk, C. (2021). Toward a stronger theoretical grounding of computational communication science: How macro frameworks shape our research agendas. *Computational Communication Research*, *3*(2), 1–28.

Walter, D., & Ophir, Y. (2019). News frame analysis: an inductive mixed-method computational approach. *Communication Methods and Measures*, *13*(4), 248–266.

Watanabe, K. (2021). Latent semantic scaling: A semisupervised text analysis technique for new domains and languages. *Communication Methods and Measures*, *15*(2), 81–102.

Watanabe, K., & Müller, S. (2021). Quanteda tutorials. Retrieved from https://tutorials.quanteda.io.

Webb Williams, N., Casas, A., & Wilkerson, J. D. (2020). Images as data for social science research. Cambridge: Cambridge University Press.

Welbers, K., van Atteveldt, W., & Benoit, K. (2017). Text analysis in R. *Communication Methods and Measures*, *11*(4), 245–265.

Wettstein, M. (2016). *Verfahren zur computerunterstützten Inhaltsanalyse in der Kommunikationswissenschaft*. Retrieved from http://opac.nebis.ch/ediss/20162838.pdf.

Wilkerson, J., & Casas, A. (2017). Large-scale computerized text analysis in political science: Opportunities and challenges. *Annual Review of Political Science*, *20*, 529–544.

Young, L., & Soroka, S. (2012). Affective news: The automated coding of sentiment in political texts. *Political Communication*, *29*(2), 205–231.

Valerie Hase is a Research Assistant at the Department of Media and Communication, LMU Munich. Her research focuses on crisis and conflict communication, terrorism and text as data/computational social science.



Content analysis in mixed method approaches

Laia Castro, Theresa Gessler und Sílvia Majó-Vázquez

1 Introduction

In recent years, scholars have combined manual and automated content analysis with a broad range of other methods of data collection to analyze communication effects on public opinion, and to validate findings obtained through other means and sources. While mixed approaches based on content analysis and another method are not new (Lazarsfeld et al. 1968; Miller et al. 1979), their importance in communication studies is growing as new data sources become available and new methods are developed. In this chapter, we present a synthesis of different types of research designs applying content analysis in mixed methods approaches. This review is based on a strategic sample of cases and studies that we use to provide an articulated view of disparate and unconnected research areas. Overall, this chapter should serve as a starting point for researchers that seek to optimize the use of content analysis by combining it with other methods of data collection and analysis to account for a broad repertoire of socially relevant phenomena.

L. Castro (✉)
Departament de Ciències de la Comunicació and IKMZ, Universitat Internacional de Catalunya & Universität Zürich, Barcelona, Spanien
E-Mail: lcastro@uic.es; l.castro@ikmz.uzh.ch

T. Gessler
Institut für Politikwissenschaft, Universität Zürich, Zürich, Schweiz
E-Mail: gessler@ipz.uzh.ch

S. Majó-Vázquez
Reuters Institute for the Study of Journalism, University of Oxford, Oxford, United Kingdom
E-Mail: silvia.majo-vazquez@politics.ox.ac.uk

F. Oehmer-Pedrazzi et al. (Hrsg.), *Standardisierte Inhaltsanalyse in der Kommunikationswissenschaft – Standardized Content Analysis in Communication Research*, https://doi.org/10.1007/978-3-658-36179-2_4

Citizens nowadays use and combine information from different sources (TV, newspapers, radio, Internet) and genres (e.g., news, infotainment) more or less simultaneously and with different degrees of attention. In many cases, the same content is conveyed through different platforms and may even come mediated through friends, acquaintances and extended networks of unknown contacts. This complex and diversified information environment, which some defined as a hybrid media system (Chadwick 2013) has not gone unnoticed by communication scholars.

For researchers interested in the impact of messages and media consumption on behavior, the new information ecosystem poses challenges, since effects depend on these very diverse and ever-changing patterns of exposure to information. This also has practical implications: to address many pressing research questions, scholars require vast datasets of individual usage patterns. Collecting and analyzing those datasets require considering user's privacy expectations and obtaining their consent. Oftentimes, researchers also need to analyze access to information via social media referrals (e.g. Cardenal et al. 2019) or shared links using platforms' Application Programming Interfaces (APIs). This can be challenging as APIs' terms of use are frequently changing and plagued with data access restrictions, which can only be overcome by agreements between academia and social media platforms (Boeschoten et al. 2020; King and Persily 2019). Finally, wrangling such big datasets call for cross-disciplinary collaborations with much larger teams than most scholars were used to work with just a few years ago (King 2014).

There is no doubt, the opportunities offered by the current information ecosystem outweigh the challenges, however. We can now observe how individuals at the receiving end use and interact with different information sources with unprecedented levels of granularity and precision. Mobile apps and Internet browsers allow scrutinizing use habits and detecting levels of individual attention[1] in unprecedented ways. The possibilities provided by the internet to collect different types of content and messages (conveyed through tweets, posts, news stories or political statements) and link them to individual reads, shares, re-tweets, posts, comments allow, for instance, exploring immediate behavioral reactions to information among big-N population samples (Barberá et al. 2019). Also, a growing number of open online repositories and archives of different data types (media content, experts' surveys, codes or even pre-registered research designs) allows to harmonize and cross-validate communication texts with data collected by other means (see for instance Harvard Dataverse, see also Crosas 2013). At the same time, social scientists leverage these new sources of data by increasingly borrowing tools and techniques well-established in other scientific fields, like network

[1]Analysis of such data is always subject to users' permissions and needs to be embedded in a robust research design that accounts for differences in paticipants' willingness to share privacy-sensitive data (Boeschoten et al. 2020).

Table 1 Types of mixed approaches using content analysis (own representation)

	Research aim	Studies	Methods
Correlational or *second-order* linkage analysis	Inferring media effects by correlating aggregated content data and aggregated survey data over time	Boomgardeen and Vliegenthart (2007, 2009); Brosius et al. (2019a); Hester and Gibson (2003)	Manual and automated content analysis, descriptive and inferential statistical analyses, time series analysis
***First-order* linkage analysis**	Inferring media effects by weighting individual survey data with aggregated content data	Boomgaarden et al. (2011); Castro and Hopmann (2017); de Vreese and Semetko (2004); Lazarsfeld et al. (1968)	Manual content analysis, descriptive and inferential statistical analyses
Cross-validating content data	Generalizing results from and determining relative validity of data collected through content analysis	Bakker and Hobolt (2013); Helbling and Tresch (2011); Hutter and Gessler (2019); Marks et al. (2007)	Manual and automated content analysis, descriptive and inferential statistical analyses using survey data, time series analysis
Semantic network analysis	Mapping shared semantic spaces between subjects and explaining their aggregated behavioral patterns over time	Chung and Park (2010); Danowski and Park (2013); Doerfel and Connaughton (2009); Leifeld (2013); Leifeld (2016)	Manual and automated content analysis, network analysis, inferential network analysis

analysis or text mining, which in turn offer new opportunities to make sense of online content data and connect it to other sources of information.

Ultimately, (old and new) multi-method approaches can help researchers explain relevant social phenomena from the ever-expanding communication texts and modes. In what follows, we offer an overview of how mixed method approaches can optimize the use of content analysis. We present frequently used mixed method designs that embed content analysis along three research aims (see a summary on Table 1). We first outline a set of strategies to link content data with survey data to analyze media audiences' use patterns and their *effects*. We then dive into a second strand of studies that have taken advantage of the strengths of several data collection methods to provide robustness, *cross-validate* and generalize outcomes from content data of media or politicians. Third, and last, we show how network analysis can offer modeling strategies to communication scholars that use content data to *map* relationships between subjects of theoretical interest and explain their behavior over time. In the final section of this chapter, limitations of the afore-mentioned approaches and directions for future research are discussed.

2 Linkage analyses

Studies linking content data with survey data are often called *linkage analyses* or *linkage studies* (de Vreese et al. 2017; Scharkow and Bachl 2017). These studies have been particularly frequent in political communication research[2] and relate media content to media use and its effect among large population samples.[3] Linkage studies allow for comprehensively investigating *what kind* of content people use, with which *frequency* and intensity, and how it drives a particular reaction, attitude change or behavior. Overall, linkage analyses help put "flesh on the bone" (Schuck et al. 2016, p. 206) to studies aiming at understanding how media usage patterns cause a particular outcome, either over-time or/and at multiple units of analysis (message, but also source or country).

To date, studies using linkage approaches have followed *two* main strategies. A first set of studies infer people's exposure to a particular content and the effect of such communicative content by linking aggregated content data to aggregated survey or behavioral data. This approach has also been called second-order linkage (Neuendorf 2002; Schulz 2008). Studies of such kind typically use a message code or category (e.g., the salience of a policy issue), aggregate relevant units of analysis accordingly (e.g., proportion of news coverage reporting on the issue) and, finally, correlate those units to aggregated use, attitudes or behaviors (e.g., audiences' perceptions about such policy issue). This allows researchers to obtain a glimpse of which portion of the public may have been exposed to respectively affected by a given message.

A case in point are studies from the *agenda setting* literature (e.g., McCombs and Shaw 1972; Soroka 2002), but further studies on U.S. media framing and the *tone* of EU-related news coverage also made use of second-order linkage. Hester & Gibson (2003) content-analyzed a series of stories on economic news in the US to find *negative and positive frames* on the economy and link them to monthly aggregated consumers' evaluations of economic conditions in a 48-month period span. As yet another example, Vliegenthart et al. (2008) used content analytical indicators of *conflict and benefit framing* in news coverage and compared values with aggregated Eurobarometer survey data on individuals' support toward EU integration across 17 years, using time variation to account for how media contexts explain "public opinion dynamics" (Vliegenthart

[2] Studies combining content and survey data have been also employed to analyze the impact of media frames in coverage of scientific issues on public opinion (e.g., Arlt and Wolling 2016; Guenther and Kessler 2017) and, more rarely, in the fields of health communication (Nagelhout et al. 2012) and research on effects of satire (Morris 2009). See relevant chapters in this volume and de Vreese et al.(2017) for a recent overview.

[3] Less frequently, researchers have also combined content and survey data to discern the impact of *politicians*' policy making or speeches on media coverage and public concerns (Lazarsfeld et al. 1944; Soroka, 2002).

et al., 2008, p. 415). Boomgaarden and Vliegenthart (2007) used computer-assisted content analysis of Dutch national newspapers to assess the impact of immigration-related media coverage on vote percentage for anti-immigrant parties and, more recently, Brosius et al. (2019a) employed sentiment analysis to assess the impact of news coverage *tone toward the EU* on citizens' EU trust (see also Brosius et al. 2019b).

The above mentioned studies are longitudinal in nature and use time-series analyses to compensate for the reduced number of observations resulting from aggregating data. However, all of these studies are limited by their inability to establish a one-to-one correspondence between a particular message and its recipient. That is, even though some of them discriminate how much news coverage a particular media outlet or program commits to a relevant dimension, the use of aggregated audiences makes it difficult to determine individual behavioral effects or, where it is not even possible to measure general news or media use, to grasp which messages people may have actually been exposed to.

A second set of studies connecting content data and media use at the individual level – also called first-order linkage (Neuendorf 2002) – are better suited to establish such one-to-one correspondence between messages (or sources) and individuals exposed to them, and engage in causal analysis. These studies tend to be more precise and focus on the impact of content analytical variables at the message, program or medium level, rather than at the media or national levels. As with second-order linkage studies, researchers using first-order linkage designs code or categorize a variable – *issue, actor or event visibility or prominence,* tone, frames, *exemplars, message types* – and then aggregate results of such content analysis at relevant coding units, whether headlines, news stories, articles or TV programs (Vreese and Semetko 2004; Donsbach 1991; Schuck et al. 2014). More sophisticated approaches also account for how *prominently* a coded variable is placed in a story; or weigh content variables' code occurrences by the *length of the news story; medium circulation numbers or audience shares* (de Vreese et al. 2017). In a second step, first-order analyses use individuals' responses to a survey questionnaire to determine frequency and amount of usage of different outlets, platforms or messages. The actual linkage is then done by *weighting* the proportion or frequency with which a given media message variable is used in each medium, with the frequency of individuals' exposure to that medium (e.g., de Vreese and Semetko 2004; de Vreese et al. 2017; Schuck et al. 2014). Some more complex designs weigh exposure to media messages by *publication recency,* that is, how close in time the news story's publication was from an individual's exposure to the medium when it was published (e.g., de Vreese et al. 2017).

Seminal studies embedded in the so-called first-order linkage strand of literature combining content data and media use at the individual level are Erbring, Goldenberg und Miller (1980), Kepplinger et al. (1991), Lazarsfeld et al. (1968), and Miller et al.

(1979). These studies were among the first in supplementing public opinion studies with content analyses of campaign messages in newspapers, magazines, radio speeches, and newscasts (Lazarsfeld et al. 1968; Schulz 2008). They were mostly concerned with agenda setting and *issue coverage* effects on individuals' perceptions of the most important problem facing the country (Erbring et al. 1980 for the US case) or familiarity and position toward an issue (Kepplinger et al. 1991 for the German case). Lazarsfeld et al. (1968) were also among the first in weighting measures of self-reported exposure to campaign information with media's Republican and Democrat leanings to analyze *selective exposure* patterns and implications.

Most recently, studies that weighed self-reported measures of news or media use with aggregated values of content analytical variables have investigated effects of media coverage (issue or actor visibility, prominence and attention) on the public image of political leaders (Bos et al. 2011) or *media's EU evaluations* on EU skepticism (Peter 2004) and EU vote (van Spanje and de Vreese 2014), news media tone on party or vote choice (de Vreese and Semetko 2004; Hopmann et al. 2010) in referendums, or else exposure to non-like-minded or counter-attitudinal views through the media on vote decisiveness (Matthes 2012) or EU turnout (Castro Herrero and Hopmann 2017; see also Castro et al. 2018 for a similar approach applied to a study using *cross-cutting media* exposure as an outcome variable). Framing studies or studies focusing on *journalistic reporting styles* have also made extant use of linkage analysis, as attested by a strand of research investigating how exposure to *strategic or conflict framing,* or *populist style* affect political cynicism, learning, political polarization or turnout (Jebril et al. 2013; Müller et al. 2017; Schuck et al. 2013, 2014). Some of the studies abovementioned including Takens et al. (2015) use panel data to investigate how media coverage of political leaders affects electoral behavior. Takens et al. (2015) longitudinal study is particularly notable since they used 11 waves of a survey to discern media *priming effects* on people's evaluations of party leaders and their use in voting decisions. As de Vreese et al. (2017) posit, the use of panel data allows to capture information use across time and represents a more reliable first-order linkage of content and behavioral data since it is able to identify within-individual changes in attitudes and cognitions.

First-order as well as second-order linkage studies face a number of problems. The presence of *measurement error* in empirical approaches that combine content data with individual-level data is no exception and can bias effects' estimates. With regards to content media data, Scharkow and Bachl (2017) posit that between-outlet variance might be generally *underestimated* as a result of random misclassifications in content analyses scrutinizing proportion of news stories with a particular message, which in turn may underestimate effects of using such outlets on particular dimensions. De Vreese et al. (2017) further point at problems to build *equivalent* measures of visibility or prominence across different types of outlets (e.g., is a particular news item equally prominently featured when included on the front page of a newspaper or when included among the first broadcast news stories in a TV news bulletin?). Potential remedies to derived measurement errors are considering alternative specifications to

chosen operationalizations or to assess the *predictive validity* of different measurement strategies (Dilliplane et al. 2013). For instance, coming back to the prominence example, researchers may assess whether a story coded as prominent in a TV news program is equally influential (e.g., mobilizing) as a prominent story in a newspaper (de Vreese et al. 2017). De Vreese et al. (2017) also suggest discounting content features that may appear simultaneously with the content feature of theoretical interest but have the opposite effect (e.g., by subtracting one content score from another, p. 230) as a way to refine effect measurement.

Self-reported measures of media use are another important source of measurement error. Individuals' problems to recall how often they consult information sources as well as satisficing strategies may increase random measurement errors (Scharkow and Bachl 2017), while social desirability bias might yield more systematic errors. In this vein, self-reports have often been criticized for overestimating media consumption (Prior 2009; de Vreese et al. 2017) and in particular consumption of news and political articles (Vraga and Tully 2018). These overestimations of news consumption pose additional challenges since, as Scharkow and Bachl (2017) show, overreports from *bounded* measures of news exposure may "decrease its variance as compared to the true media use" (Scharkow and Bachl 2017, p. 327). Previous research tried to find frequent correlates of systematic over-reporting such as political interest or strength of partisanship to identify usual sources of biases, with mixed results (Guess et al. 2018; Prior, 2013). Further approaches have suggested alternatives that may increase the reliability and validity of self-reported measures of information usage, such as providing survey respondents with specific lists of outlets, programs and frequency scales (Andersen et al. 2016; Dilliplane 2011; Moehler and Allen 2016), or analyzing additional measures of message attention, motivation to seek information (Chaffee and Schleuder 1986), or information processing (Ball-Rokeach and DeFleur 1976) and need for cognition, among others (see Althaus and Tewksbury 2007, for an overview). Additionally, Takens et al. (2015) account for potential decays in media attention across time in their multi-wave study by using a decay rate according to a predicted probability of decrease in retrieving campaign information. More generally, Scharkow and Bachl (2017) put forth a simulation framework that could be used to gauge potential bias in linkage analysis for different values in error estimates of content and survey data in conjunction, which, as the authors put it, "can be a useful tool for a priori power analyses or post hoc sensitivity analyses" (p. 336).

3 Cross-validating content data

A second strand of mixed method designs for content analysis is concerned with the validation of content data, often with the purpose of generalization. This typically involves comparing results from content analysis on a primary data source with results

on the same dimensions yielded by data collected through other means.[4] These other data sets serve as a benchmark of comparison to assess so-called *convergence* or *relative* validity (Marks et al. 2007) of measures.

In our discussion of examples of such validation efforts, we will focus on the measurement of party positions, an area where there is extensive research on the trade-offs between different measurements. This is because such latent positions can be measured with a variety of approaches, whether based on expert surveys, elite surveys or through content analysis of a variety of texts published by parties and politicians. That is, different from studies of media effects, researchers need to justify both their measurement tools and the texts they apply these tools to.

Many studies justify their choice of text with a comparison to results from other texts (e.g., Hutter and Gessler 2019). The different texts produced by parties differ in their audience and purpose as well as the frequency of their publication. Consequently, researchers have to make trade-offs between choosing sources that explicitly communicate positions (e.g., party manifestos), sources that are read by a wider audience (e.g., news reports on party positions) and sources that are published with a higher frequency (e.g., party press releases or tweets). Parties can strategically choose to emphasize different issues across these platforms. Hence, while establishing the comparability of results across sources is crucial for research, the goal can only be to establish convergence since each platform comes with its own logic, frequently termed as 'affordances' (Bucher and Helmond 2017). While party positions will differ across platforms due to differences in the audience and purpose of these platforms, these measures should converge for a single party across multiple platforms.

Another approach has been to validate the results of content analysis through comparison with measures based on surveys (e.g., Marks et al. 2007; Bakker and Hobolt 2013; Helbling and Tresch 2011). In the absence of a gold standard or a *criterion* measure of party positioning on European integration, Marks et al. (2007) compared the most frequently used content data to identify party positioning (i.e. electoral manifesto data) to measures of party positioning on European integration obtained from different surveys (expert surveys, elite surveys, and election surveys). Analyzing the error structure for each dataset (i.e. for which types of parties the prediction of one data source deviates from that made based on other data sources), they show that in some cases (i.e. when parties are internally divided), combining manifesto content with other datasets yields more valid measures of their positioning on European integration. Hence, this type

[4] For a comprehensive overview of cross-validation techniques of *automated* content analysis using *manual* content analysis see chapter on automated content analysis by **Valerie Hase in this volume**. Also, although not discussed in this section, some recent studies cited in this volume cross-validate news media content with *experiments* to e.g. compare public understandings of terrorism (Huff and Kertzer 2018) (see chapter on content analysis in research on terrorism coverage in this volume),

of cross-validation is particularly suited for establishing the limits of content analysis (but see Benoit and Laver 2007).

Such cross-validation with existing measures is particularly important when establishing the validity of new measures. This also concerns studies with digital data that draw on content analysis to varying extents: For example, Mellon (2014) compared interviewees' responses from Gallup survey questions on America's most important problems with Google search trends of those same policy issues to determine to which extent the latter can be used as a proxy for issue salience in public opinion. Other studies contain a bigger content-analytical element as they use dictionary-based content analysis on text snippets collected from the internet (e.g., O`Connor et al. 2010) and validate sentiment or salience measures obtained from this with survey data. As with linkage analyses (e.g., de Vreese et al. 2017), these studies frequently make use of time series analyses in order to account for the dynamic aspects of the data and increase the validity of their analysis. This approach to cross-validate data retrieved from public opinion polls and surveys with online content analysis is also similar to studies on agenda setting media effects using second-order or correlational linkage analysis (e.g., Conway et al. 2015; Soroka 2002). Hence, combining different data sources for validation faces similar challenges in establishing correspondence between both measures.

In some cases, combining content data with other data for validation purposes can also provide substantive insights: One such application of automated and semi-automated content techniques is provided in Guess et al. (2019). Guess and colleagues compared self-reported questions on individuals' frequency of posting "about politics" with their actual political posting activity. To categorize individuals' posts as political, they hand-coded a set of Facebook and Twitter posts and used the resulting label as a benchmark to train a machine learning model and classify the rest of the data. Content analysis was therefore used to measure the level of discrepancy between actual political online activity (posting activity) and their subjective and reported behavior in survey responses. They found that the high variance in how people tweet about politics (with some tweeting multiple times a day while others doing it only twice a month) and the use of a bounded 6-point scale question for self-reporting could explain discrepancies in actual posting and self-reports among heavy users.

4 Semantic network analysis

The combination of content analysis and tools from network science results in the fourth and final analytical framework that we present in this chapter. This approach is known more broadly as semantic network or discourse network analysis[5] and offers a set of modeling strategies to assess media, political or other communication content

[5] Only semantic network will be used hereafter.

as a relational structure that can be then used to explain processes and outcomes such as agenda setting or voting (Doerfel and Connaughton 2009; Leifeld 2017; Yang and González-Bailón 2017). Semantic network analysis is a well-established analytical framework in network science but uncommon in political and communication research. Only as early as 2005, network science was considered a new scientific discipline[6] (Barabási 2015). No wonder, why its subfields, as semantic network analysis, are not yet broadly adopted by researchers.

In general, network science allows to shed light on processes that underpin social relations. More specifically, networks are simple representations of those processes and capture the basic relations among those who take part on them. Nodes and ties are the two basic elements of any network and what they represent depend on the specific question to be addressed. As an example, nodes in semantic networks can represent either words or concepts (e.g., topics or frames of certain policies or debates) or subjects or actors (e.g., media outlets, politicians or social media users). In those examples, ties can represent the number of actors using certain words or concepts, or they can depict the amount of co-occurring words or concepts commonly used by actors. Overall, as Yang and González-Bailón (Yang and González-Bailón 2017) put it, ties in semantic networks proxy social relations by depicting associations between concepts or between those who use them. Figure 1 illustrates three different types of semantic networks. Independently of what nodes and ties measure in any specific study (e.g., relations between concepts or actors who use certain frames), the underlying idea is that shared understandings of issues and concepts can help us explain the functioning of institutions or public opinion building. Through semantic network those shared understandings can be mapped and reduced to structures of interdependencies that then, can be analyzed using a different set of tools from network science.

Note: The *toy* network in panel A is a two-mode or bipartite network, based on affiliation data and therefore, it has two types of nodes. Red nodes represent semantic concepts and green nodes represent actors. Ties connect actors with the semantic concepts they have used. This is a weighted network, as illustrated by the width of the ties, which measure the strength of the connection between actors and concepts. Notably, relations in semantic networks can be captured as a binary variable, whether they exist or not, or on a continuous scale as the example provided. As a real world example, ties in this toy network can represent, for instance, the number of times a political candidate has used a certain concept in her public speeches. Toy networks in panel B and C represent one-mode network projections from different two-mode networks. Hence, there is only one type of node in each network. On the toy network on panel B, nodes can represent semantic concepts and ties the number of actors, for instance, that used a pair of concepts. Finally, on panel C nodes represent actors and ties would measure the

[6] In social science, network analytical approaches can be traced back at least to the seventies with the landmark paper by Granovetter on "weak ties" (Granovetter 1973).

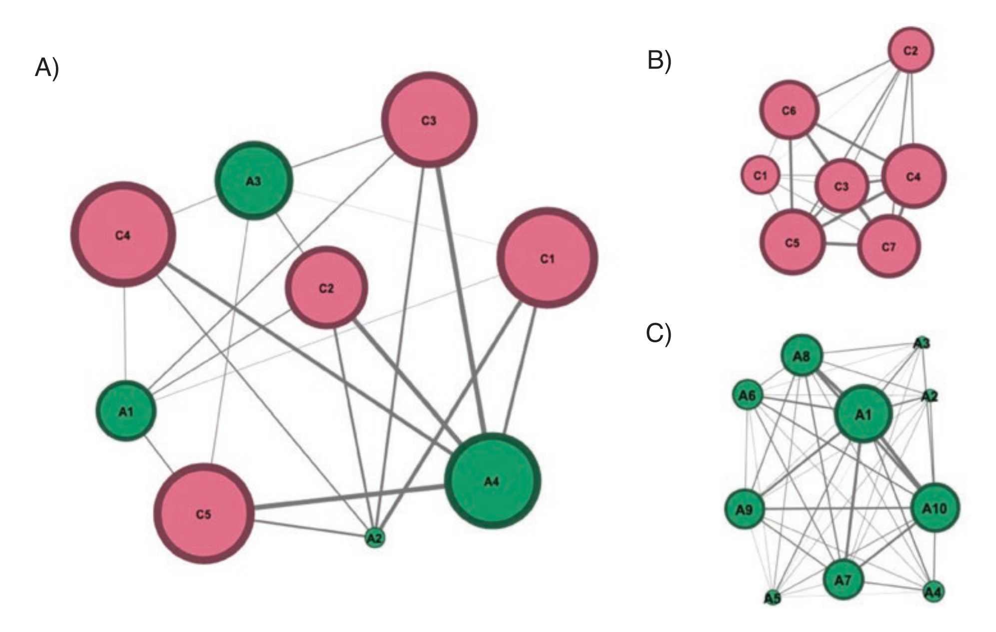


Fig. 1 Illustration of three toy semantic networks as graph (own representation)

strength of their relation based on shared concepts. For illustrative purposes, nodes have been sized according to their degree centrality measured as the strength of their relation with the other nodes in the network.

According to (Shumate et al. 2013) semantic networks can be examined at different levels. First, at the basic level, one can assess the characteristics of the network structure and identify patterns of word usage in a corpus of text. This approach can result in a network mapping co-occurrence of concepts where clusters or other relevant structural features are identified. Along these lines, (Farrell 2016) shows how network analysis enables empirical testing of discursive field theory on his study on the role of corporate funding in the polarization of the climate change debate. He applies automated text analysis to identify frames on a corpus of text produced by 164 organizations in the counter climate change movement during a time window that spans twenty years. Then, he shows by means of network analytical tools, that private funded organizations published significantly more content aimed to polarize the climate change debate.

Secondly, going beyond the descriptive effort, one can also use semantic network to *explain* outcomes by examining relations through shared meanings. An illustration of the later is (Leifeld 2013), where the author analyses the issue positions around the German pension debate.[7] His approach illustrates the potential of network analysis to identify

[7] Note that data for this study was collected using Discourse Network Analyzer (Leifeld 2019).

mechanisms explaining the relationship between political actors through their shared understanding of a political process. Leifeld (2013) applies network analysis techniques to assess how different coalitions interact, across time, to frame the debate around pensions and eventually, adopt a new regulation scheme. For this, he gathers statements of politicians on the media and the Parliament and uses manual content analysis and annotate the corpus of text to reduce it to shared frames. Then, he creates networks of actors and shared frames across time to understand how policy debates evolve. Finally, he applies inferential network techniques to determine micro-level processes governing political discourses, such as popularity, coalition formation dynamics and clustering among different political actors (Leifeld 2016).

How semantic network can be applied to understand political outcomes is also illustrated by (Doerfel and Connaughton 2009). Despite the authors do not use inferential network techniques and hence, explicitly avoid making causal claims, their work shows that semantic structures help to understand electoral outcomes. In their study, they assess the structural semantic similarity between presidential winners and losers in the US over 44 years. Their result shows that more semantically cohesive and central discourses are systematically used by presidential winners. They obtain the semantic network structures by applying automated content analysis techniques to map co-occurrences of words in all televised presidential debates which are later linked to each candidate's discourse. As yet another example of the explanatory value of semantic network (Yang and González-Bailón 2017) point to the work of (Bail 2012). This author identifies how antimuslim frames on the 9/11 attacks permeated media mainstream reporting. For this he combines manual content analysis with network tools and shows how the latter "can enrich researchers' explanatory repertoire" (Yang and González-Bailón 2017).

5 Outlook and desiderata

In this chapter, we heeded the call by previous studies to provide an informed overview of benefits and pitfalls of "integrated research designs" (Stier et al. 2020b, p. 2). In particular, we focused on the potential of mixed method approaches to optimize the use of content analysis in advancing research along three main aims. That is, we first described a series of frequently-used steps to linking content data with survey data and analyze *media effects*. Second, we also reviewed studies that *cross-validate* content data with other data obtained through different methods with the aim of generalization. Finally, we explained how network analysis offer modeling strategies to communication scholars interested in using content data to *map* relationships between subjects and explain their aggregated *behaviors* over time.

We first outlined the methodology and applications of so-called linkage analyses that connect media contents with their effects. In contrast to alternative methods that primarily offer internal validity (namely, experiments), these "real-world designs"

(Schuck et al. 2016, p. 210) allow scholars to work with large samples and provide researchers with (a) the possibility to capture individuals' information habits and their effects and (b) versatility in analyzing data at multiple units of analysis (type of source, user, country).

Until recently, the main challenge of linkage analyses was to determine whether and how frequently and prominently individuals encountered a particular message in a given source. More specifically, researchers using this approach faced difficulties to measure message *exposure at lower levels than a medium* and potential reliability problems of survey responses. However, the ability to measure such exposure is growing, not only because of researchers' improved remedies to measurement errors in content analysis and self-reports (see section on linkage analyses above); but also because of the new possibilities offered by *digital trace data.*

Researchers can now ask respondents of a survey for consent to collect their anonymized online behavioral data during a set time window. This allows them to trace individuals' *actual exposure* to a specific media content and link it to their attitudes, preferences and behaviors (e.g., Peterson et al. 2019). These new possibilities come with limitations, however. Consent ratios for web tracking are still particularly low (Guess et al. 2019; Stier et al. 2020b) and introduce additional *sample biases* among non-probabilistic online population samples (for a discussion on ways to address this issue, see Peterson et al. 2019). Furthermore, when coupling survey with social media data, researchers must face limitations arising from the low penetration rates of some of those platforms, especially those which provide easier access to their data e.g., Twitter, Reddit, as well as limited access to users' behavioral data due to e.g. frequent changes in terms of use of platforms' APIs. An additional challenge that needs to be addressed in order to take full advantage of online behavioral data potentialities is the need to *simultaneously track* individuals' navigation patterns across multiple platforms and devices (desktops, mobiles), since exposure and attention to certain content might be moderated by the use of different devices (Dunaway et al. 2018; T. Yang et al. 2020). Finally, researchers need to be aware of frequent changes in *conditions of use* of social platforms or search engines that can affect online behavior such as news or political information use. For example, during recent years, Facebook decided to downgrade news content in favor of closer friends' posts and Twitter increased the amount of characters allowed per tweet (Mosseri 2018; Rose 2017). Those changes can erroneously be interpreted as individual behavioral signals as past research has shown (Salganik 2017).

Overall, research attempts to analyze frequent individual exposure to information at lower levels of analysis than the medium or the platform (e.g., message, news story) by combining *behavioral data* and automated *content analysis* seem promising but are still limited and scarce. In this vein, most studies on media consumption have been drawing on data at the domain or URL level (Allen et al. 2019; Cardenal et al. 2019; Stier et al. 2020a; Tyler et al. 2019)**.** The analysis of media content at the URL level (Tyler et al. 2019) lack the granularity to assess the exact type of content (e.g., frames, tone, reporting styles) that is being accessed online. Looking ahead, more researchers

should aim at crawling content below the URL level to capture "real world" and frequent information habits (see Guess et al. 2018; Peterson et al. 2019 for recent examples).

For cross-validation, the main way forward is the question of scale: Machine learning approaches increasingly allow scaling up coding done on a smaller sample. While this increases the generalizability of content analytical data (one of the main aims of cross-validation), the *transferability of machine learning approaches across text types* – which is crucial for cross-validation – remains challenging due to the lower performance of classifiers out of their training sample. Here, unsupervised approaches like structural topic modeling may provide an interesting avenue forward (see Heiberger et al. 2021).

Finally, despite the potential of semantic network analysis, scarce research to date has used it to measure shared meanings of concepts or frames and their relation to (political) outcomes (Shumate et al. 2013). Most of the research in the field has mainly used cross-sectional data. Notably though, the temporal dimension encodes important information to understand processes like political polarization and other public opinion *dynamics* (Yang and González-Bailón 2017) and yet few studies have taken a longitudinal perspective – the cases above mentioned being among the few notable exceptions. Furthermore, there has been little *theory* driving most of the studies in this field, which, as Shumate et al. (2013) note, have mostly inductively focused on clusters of shared meanings and frames or prominent concepts or actors (Chung and Park 2010; Danowski and Park 2013; Farrell 2016). In the future, researchers should focus on employing semantic network analysis to understand the underlying mechanisms driving patterns of shared meanings and use of words, as well as explaining the outcomes expected from those relations. Ideally, they should also advance the *consensus around the network metrics* to summarize the properties of semantic structures at the local – e.g., node centralization, and meso levels, e.g., reduction techniques. On a more general and final note, future and more comprehensive literature reviews and meta-analyses on mixed-method approaches should account for methods of data collection and analysis other than those discussed in this chapter. Prospective overviews should devote more attention to identifying frequent research designs and data types that have been used in combination with content analysis and data to address research aims beyond the three highlighted in this chapter. For example, *input–output analyses* comparing politicians' or governmental communication to their media coverage (Jungblut 2020) or research on journalistic values and processes behind *news decisions* have combined different kinds of texts and media content, and journalists' interviews to study news coverage of relevant societal issues. Additionally, a few recent studies have employed standardized content analysis to evaluate eye movements' records from an eye-tracker in experiments analyzing online searches (e.g., Kessler and Zillich 2017) or to automatically code open-ended survey questions (Hopkins and King 2010; Simon and Xenos 2004) and estimate topic prevalence contingent on each respondent's characteristics (Roberts et al. 2014). Future overview and empirical studies may hence resort to these uses of content analysis to complement the selection of research areas and studies showcased here and advance an articulated view of the combinatory power of mixing content analysis with other methods to study socially relevant phenomena.

Relevant Variables in DOCA – Database of Variables for Content Analysis

Correlational linkage analysis: https://doi.org/10.34778/1i
First-order linkage analysis: https://doi.org/10.34778/1j
Eye tracking data: https://doi.org/10.34778/1a

References

Allen, J., Howland, B., Mobius, M. M., Rothschild, D. M., & Watts, D. (2019). Evaluating the Fake News Problem at the Scale of the Information Ecosystem. *Available at SSRN 3502581*.

Althaus, S. L., & Tewksbury, D. H. (2007). Toward a new generation of media use measures for the ANES. *Report to the Board of Overseers of the ANES*.

Andersen, K., H. de Vreese, C., & Alb\a ek, E. (2016). Measuring media diet in a high-choice environment-Testing the list-frequency technique. *Communication Methods and Measures*, *10*(2–3), 81–98.

Arlt, D., & Wolling, J. (2016). Fukushima effects in Germany? Changes in media coverage and public opinion on nuclear power. *Public understanding of science, 25*(7), 842–857.

Bail, C. A. (2012). The fringe effect: Civil society organizations and the evolution of media discourse about Islam since the September 11th attacks. *American Sociological Review*, *77*(6), 855–879.

Bakker, R., & Hobolt, S. B. (2013). Measuring party positions. *Political Choice Matters: Explaining the Strength of Class and Religious Cleavages in Cross-National Perspective*, 27–45.

Ball-Rokeach, S. J., & DeFleur, M. L. (1976). A dependency model of mass-media effects. *Communication Research*, *3*(1), 3–21.

Barabási, A.-L. (2015). *Network Science*. Cambridge University Press.

Barberá, P., Casas, A., Nagler, J., Egan, P. J., Bonneau, R., Jost, J. T., & Tucker, J. A. (2019). Who leads? Who follows? Measuring issue attention and agenda setting by legislators and the mass public using social media data. *American Political Science Review*, *113*(4), 883–901.

Benoit, K., & Laver, M. (2007). Estimating party policy positions: Comparing expert surveys and hand-coded content analysis. *Electoral Studies*, *26*(1), 90–107.

Boeschoten, L., Ausloos, J., Moeller, J., Araujo, T., & Oberski, D. L. (2020). Digital trace data collection through data donation. ArXiv:2011.09851 *[Cs, Stat]*. http://arxiv.org/abs/2011.09851.

Boomgaarden, H. G., Van Spanje, J., Vliegenthart, R., & De Vreese, C. H. (2011). Covering the crisis: Media coverage of the economic crisis and citizens' economic expectations. *Acta Politica*, *46*(4), 353–379.

Boomgaarden, H. G., & Vliegenthart, R. (2007). Explaining the rise of anti-immigrant parties: The role of news media content. *Electoral Studies*, *26*(2), 404–417. https://doi.org/https://doi.org/10.1016/j.electstud.2006.10.018.

Bos, L., Van der Brug, W., & De Vreese, C. (2011). How the media shape perceptions of right-wing populist leaders. *Political Communication*, *28*(2), 182–206.

Brosius, A., van Elsas, E. J., & de Vreese, C. H. (2019a). Trust in the European Union: Effects of the information environment. *European Journal of Communication*, *34*(1), 57–73.

Brosius, A., van Elsas, E. J., & de Vreese, C. H. (2019b). How media shape political trust: News coverage of immigration and its effects on trust in the European Union. *European Union Politics*, *20*(3), 447–467. https://doi.org/10.1177/1465116519841706.

Bucher, T., & Helmond, A. (2017). The affordances of social media platforms. *The SAGE Handbook of Social Media*, 233–253.

Cardenal, A. S., Aguilar-Paredes, C., Cristancho, C., & Majó-Vázquez, S. (2019). Echo-chambers in online news consumption: Evidence from survey and navigation data in Spain. *European Journal of Communication*, *34*(4), 360–376.

Castro Herrero, L., & Hopmann, D. N. (2017). The Virtue of Moderation: A Cross-National Analysis of Exposure to Cross-Cutting Information and Turnout. *International Journal of Public Opinion Research*.

Castro, L., Nir, L., & Skovsgaard, M. (2018). Bridging Gaps in Cross-Cutting Media Exposure: The Role of Public Service Broadcasting. *Political Communication*, 1–24.

Chadwick, A. (2013). *The hybrid media system: Politics and power*. Oxford University Press.

Chaffee, S. H., & Schleuder, J. (1986). Measurement and effects of attention to media news. *Human Communication Research*, *13*(1), 76–107.

Chung, C. J., & Park, H. W. (2010). Textual analysis of a political message: The inaugural addresses of two Korean presidents. *Social Science Information*, *49*(2), 215–239.

Conway, B. A., Kenski, K., & Wang, D. (2015). The rise of Twitter in the political campaign: Searching for intermedia agenda-setting effects in the presidential primary. *Journal of Computer-Mediated Communication*, *20*(4), 363–380.

Crosas, M. (2013). A data sharing story. *Journal of EScience Librarianship*, *1*(3), 7.

Danowski, J. A., & Park, D. W. (2013). Celebrities in the mass and Internet media and social network structures: A comparison with public intellectuals. *Manuscript. Chicago, IL: University of Illinois at Chicago*.

De Vreese, C. H., Boukes, M., Schuck, A., Vliegenthart, R., Bos, L., & Lelkes, Y. (2017). Linking survey and media content data: Opportunities, considerations, and pitfalls. *Communication Methods and Measures*, *11*(4), 221–244.

Dilliplane, S. (2011). All the news you want to hear: The impact of partisan news exposure on political participation. *Public Opinion Quarterly*, *75*(2), 287–316.

Dilliplane, S., Goldman, S. K., & Mutz, D. C. (2013). Televised exposure to politics: New measures for a fragmented media environment. *American Journal of Political Science*, *57*(1), 236–248.

Doerfel, M. L., & Connaughton, S. L. (2009). Semantic networks and competition: Election year winners and losers in US televised presidential debates, 1960—2004. *Journal of the American Society for Information Science and Technology*, *60*(1), 201–218.

Donsbach, W. (1991). Exposure to political content in newspapers: The impact of cognitive dissonance on readers' selectivity. *European Journal of Communication*, *6*(2), 155–186.

Dunaway, J., Searles, K., Sui, M., & Paul, N. (2018). News attention in a mobile era. *Journal of Computer-Mediated Communication, 23*(2), 107–124.

Erbring, L., Goldenberg, E. N., & Miller, A. H. (1980). Front-page news and real-world cues: A new look at agenda-setting by the media. *American Journal of Political Science*, 16–49.

Farrell, J. (2016). Corporate funding and ideological polarization about climate change. *Proceedings of the National Academy of Sciences*, *113*(1), 92–97.

Granovetter, M. S. (1973). The strength of weak ties. *American Journal of Sociology*, *78*(6), 1360–1380.

Guenther, L., & Kessler, S. H. (2017). Epistemological dimensions on screen: The role of television presentations in changing conceptions about the nature of knowledge and knowing. *Communications, 42*(4), 481–501.

Guess, A., Munger, K., Nagler, J., & Tucker, J. (2019). How accurate are survey responses on social media and politics? *Political Communication*, *36*(2), 241–258.

Guess, A., Nyhan, B., & Reifler, J. (2018). Selective exposure to misinformation: Evidence from the consumption of fake news during the 2016 US presidential campaign. *European Research Council, 9*(3), 4.

Heiberger, R., Majó-Vázquez, S., Castro, L., Nielsen, R.K., Congosto, M.L., Esser, F.: Don't blame the media! The role of politicians and parties in fragmenting online political debate. *International Journal of Press and Politics (IJPP).* April 2021. (Accepted).

Helbling, M., & Tresch, A. (2011). Measuring party positions and issue salience from media coverage: Discussing and cross-validating new indicators. *Electoral Studies*, *30*(1), 174–183.

Hester, J. B., & Gibson, R. (2003). The economy and second-level agenda setting: A time-series analysis of economic news and public opinion about the economy. *Journalism & Mass Communication Quarterly*, *80*(1), 73–90.

Hopkins, D. J., & King, G. (2010). A method of automated nonparametric content analysis for social science. *American Journal of Political Science*, *54*(1), 229–247.

Hopmann, D. N., Vliegenthart, R., De Vreese, C., & Alb\a ek, E. (2010). Effects of election news coverage: How visibility and tone influence party choice. *Political Communication*, *27*(4), 389–405.

Huff, C., & Kertzer, J. D. (2018). How the public defines terrorism. *American Journal of Political Science, 62*(1), 55–71.

Hutter, S., & Gessler, T. (2019). 3 The Media Content Analysis and Cross-Validation. *European Party Politics in Times of Crisis*, 53.

Jebril, N., Albaek, E., & De Vreese, C. H. (2013). Infotainment, cynicism and democracy: The effects of privatization vs personalization in the news. *European Journal of Communication*, *28*(2), 105–121.

Jungblut, M, (2020). *Strategic communication and its role in conflict news. A computational analysis of the international news coverage on four conflicts.* Springer VS.

Kepplinger, H. M., Brosius, H.-B., & Staab, J. F. (1991). Instrumental actualization: A theory of mediated conflicts. *European Journal of Communication*, *6*(3), 263–290.

Kessler, S. H., & Zillich, A. F. (2019). Searching online for information about vaccination: Assessing the influence of user-specific cognitive factors using eye-tracking. *Health Communication, 34*(10), 1150–1158.

King, G. (2014). Restructuring the Social Sciences: Reflections from Harvard's Institute for Quantitative Social Science. *PS: Political Science & Politics*, *47*(01), 165–172.

King, G., & Persily, N. (2019). A New Model for Industry–Academic Partnerships. PS: Political Science & Politics, 1–7. https://doi.org/10.1017/S1049096519001021.

Lazarsfeld, P. F., Berelson, B., & Gaudet, H. (1968). *The peoples choice: How the voter makes up his mind in a presidential campaign.* Columbia University Press. http://www.popline.org/node/517470.

Leifeld, P. (2013). Reconceptualizing major policy change in the advocacy coalition framework: A discourse network analysis of German pension politics. *Policy Studies Journal*, *41*(1), 169–198.

Leifeld, P. (2016). *Policy debates as dynamic networks: German pension politics and privatization discourse* (Vol. 29). Campus Verlag.

Leifeld, P. (2017). Discourse network analysis. In J. N. Victor, A. H. Montgomery, & M. Lubell (Eds.), *The Oxford handbook of political networks* (pp. 301–326). Oxford University Press.

Leifeld, P. (2019). *Discourse Network Analyzer* (2.0 Beta24).

Marks, G., Hooghe, L., Steenbergen, M. R., & Bakker, R. (2007). Crossvalidating data on party positioning on European integration. *Electoral Studies*, *26*(1), 23–38.

Matthes, J. (2012). Exposure to counterattitudinal news coverage and the timing of voting decisions. *Communication Research*, *39*(2), 147–169.

McCombs, M. E., & Shaw, D. L. (1972). The agenda-setting function of mass media. *Public Opinion Quarterly*, *36*(2), 176–187.

Mellon, J. (2014). Internet search data and issue salience: The properties of Google Trends as a measure of issue salience. *Journal of Elections, Public Opinion & Parties*, *24*(1), 45–72.

Miller, A. H., Goldenberg, E. N., & Erbring, L. (1979). Type-set politics: Impact of newspapers on public confidence. *The American Political Science Review*, 67–84.

Moehler, D., & Allen, D. M. (2016). The Media Diet Imbalance Score: A Measure of Aggregate Media Diet. *Communication Methods and Measures*, *10*(1), 4–12.

Morris, J. S. (2009). The Daily Show with Jon Stewart and audience attitude change during the 2004 party conventions. *Political Behavior, 31*(1), 79–102.

Mosseri, A. (2018). *News Feed FYI: Bringing People Closer Together*. Facebook. https://about.fb.com/news/2018/01/news-feed-fyi-bringing-people-closer-together/.

Müller, P., Schemer, C., Wettstein, M., Schulz, A., Wirz, D. S., Engesser, S., & Wirth, W. (2017). The polarizing impact of news coverage on populist attitudes in the public: Evidence from a panel study in four European democracies. *Journal of Communication*, *67*(6), 968–992.

Neuendorf, K. A. (2002). *For information*.

Nagelhout, G. E., Levy, D. T., Blackman, K., Currie, L., Clancy, L., & Willemsen, M. C. (2012). The effect of tobacco control policies on smoking prevalence and smoking-attributable deaths. Findings from the Netherlands SimSmoke Tobacco Control Policy Simulation Model. *Addiction, 107*(2), 407-416.

O'Connor, B., Balasubramanyan, R., Routledge, B. R., & Smith, N. A. (2010). From tweets to polls: Linking text sentiment to public opinion time series. In Fourth international AAAI conference on weblogs and social media. https://www.aaai.org/ocs/index.php/ICWSM/ICWSM10/paper/viewFile/1536/1842.

Peter, J. (2004). Our long 'return to the concept of powerful mass media'—A cross-national comparative investigation of the effects of consonant media coverage. *International Journal of Public Opinion Research*, *16*(2), 144–168.

Peterson, E., Goel, S., & Iyengar, S. (2019). Partisan selective exposure in online news consumption: Evidence from the 2016 presidential campaign. *Political Science Research and Methods*, 1–17.

Prior, M. (2009). The immensely inflated news audience: Assessing bias in self-reported news exposure. *Public Opinion Quarterly*, *73*(1), 130–143.

Prior, M. (2013). Media and political polarization. *Annual Review of Political Science*, *16*, 101–127.

Roberts, M. E., Stewart, B. M., Tingley, D., Lucas, C., Leder-Luis, J., Gadarian, S. K., Albertson, B., & Rand, D. G. (2014). Structural topic models for open-ended survey responses. *American Journal of Political Science*, *58*(4), 1064–1082.

Rose, A. (2017). *Tweeting Made Easier*. Twitter Blog. https://blog.twitter.com/en_us/topics/product/2017/tweetingmadeeasier.html.

Salganik, M. J. (2017). *Bit by bit: Social research in the digital age*. Princeton University Press.

Scharkow, M., & Bachl, M. (2017). How measurement error in content analysis and self-reported media use leads to minimal media effect findings in linkage analyses: A simulation study. *Political Communication*, *34*(3), 323–343.

Schuck, A. R., Boomgaarden, H. G., & de Vreese, C. H. (2013). Cynics all around? The impact of election news on political cynicism in comparative perspective. *Journal of Communication*, *63*(2), 287–311.

Schuck, A. R. T., Vliegenthart, R., & De Vreese, C. H. (2014). Who's Afraid of Conflict? The Mobilizing Effect of Conflict Framing in Campaign News. *British Journal of Political Science*, *FirstView*, 1–18. https://doi.org/10.1017/S0007123413000525.

Schuck, A. R., Vliegenthart, R., & De Vreese, C. H. (2016). Matching theory and data: Why combining media content with survey data matters. *British Journal of Political Science*, *46*(1), 205–213.

Schulz, W. (2008). Content analyses and public opinion research. *The SAGE Handbook of Public Opinion Research*, 348–357.

Shumate, M., Pilny, A., Atouba, Y. C., Kim, J., Peña-y-Lillo, M., Cooper, K., Sahagun, A., & Yang, S. (2013). A taxonomy of communication networks. In *Communication yearbook 37* (pp. 121–150). Routledge.

Simon, A. F., & Xenos, M. (2004). Dimensional reduction of word-frequency data as a substitute for intersubjective content analysis. *Political Analysis*, 63–75.

Soroka, S. N. (2002). Issue attributes and agenda-setting by media, the public, and policymakers in Canada. *International Journal of Public Opinion Research*, *14*(3), 264–285.

Stier, S., Kirkizh, N., Froio, C., & Schroeder, R. (2020a). Populist Attitudes and Selective Exposure to Online News: A Cross- Country Analysis Combining Web Tracking and Surveys. *The International Journal of Press/Politics*, *1*(21). https://doi.org/10.1177/1940161220907018.

Stier, S., Breuer, J., Siegers, P., & Thorson, K. (2020b). Integrating survey data and digital trace data: Key issues in developing an emerging field. *Social Science Computer Review, 38*(5), 503–516.

Takens, J., Kleinnijenhuis, J., Van Hoof, A., & Van Atteveldt, W. (2015). Party leaders in the media and voting behavior: Priming rather than learning or projection. *Political Communication*, *32*(2), 249–267.

Tyler, M., Grimmer, J., & Iyengar, S. (2019). *Partisan Enclaves and Information Bazaars: Mapping Selective Exposure to Online News*.

Van Spanje, J., & de Vreese, C. (2014). Europhile media and Eurosceptic voting: Effects of news media coverage on Eurosceptic voting in the 2009 European parliamentary elections. *Political Communication*, *31*(2), 325–354.

Vliegenthart, R., Schuck, A. R., Boomgaarden, H. G., & De Vreese, C. H. (2008). News coverage and support for European integration, 1990–2006. *International Journal of Public Opinion Research*, *20*(4), 415–439.

Vraga, E. K., & Tully, M. (2018). Who is exposed to news? It depends on how you measure: Examining self-reported versus behavioral news exposure measures. *Social Science Computer Review*, 0894439318812050.

Vreese, C. H. D., & Semetko, H. A. (2004). News matters: Influences on the vote in the Danish 2000 € referendum campaign. *European Journal of Political Research*, *43*(5), 699–722. https://doi.org/https://doi.org/10.1111/j.0304-4130.2004.00171.x.

Yang, S., & González-Bailón, S. (2017). Semantic networks and applications in public opinion research. In J. N. Victor, A. H. Montgomery, & M. Lubell (Eds.), *The Oxford Handbook of Political Networks* (pp. 327–353). Oxford University Press.

Yang, T., Majó-Vázquez, S., Nielsen, R. K., & González-Bailón, S. (2020). Exposure to news grows less fragmented with an increase in mobile access. *Proceedings of the National Academy of Sciences, 117*(46), 28678–28683.

Prof. Dr. Laia Castro is a senior research and teaching associate at the Department of Communication and Media Research (IKMZ) at the University of Zurich and adjunct professor at Universitat Internacional de Catalunya - Barcelona. She received her PhD in Social Sciences from the University of Fribourg in 2017. Her main research interests lie at the intersection of political communication, international and comparative media research and public opinion.

Dr. Theresa Gessler is a postdoctoral researcher at the Department of Political Science, University of Zurich. She holds a PhD from the European University Institute, Florence. In her research, she uses computational social science methods to study the transformation of politics through digitalization and political conflict around immigration and democracy.

Dr. Sílvia Majó-Vázquez, is Research Fellow at the Reuters Institute for the Study of Journalism at the University of Oxford. Her research focuses on the study of news audience behavior borrowing tools from network science and the role of social media as critical entrance to news information online. More on her research and publications at www.silviamajo.com.

Content Analysis in Research on News/Journalism [Die Inhaltsanalyse in der Nachrichten- und Journalismusforschung]



Formats and Genres: Collecting formal variables during content analysis

Lisa Schwaiger und Daniel Vogler

1 Introduction

When researchers analyze journalistic media, they usually select and categorize a sample of different sources. Usually this process includes defining the formats as well as genres of the content that is analyzed. This is normally done before the actual coding process. Formal variables, such as "formats" and "genres", are important but often underestimated components of content analyses. Both refer to manifest categories, provide important information about the analyzed content and are widely used: Especially for journalistic, non-fictional content of print, broadcast or online media, on which we focus in this chapter. Although closely related, the two variables refer to different layers of analysis. Whereas the variable "format" characterizes the outlet level, the variable "genre" gives us information about the form of the single news article or story. Both variables are therefore often combined in studies and used for comparative analyses to categorize other variables, such as "reporting style", or "media quality" (Rössler and Geise 2013). Considering the literature, no standardized approach exists to operationalize the two variables which leads to heterogenous applications. The operationalizations also vary depending on the research question and the investigated

L. Schwaiger (✉) · D. Vogler
IKMZ - Institut für Kommunikationswissenschaft und Medienforschung, Universität Zürich, Zürich, Schweiz
E-Mail: l.schwaiger@ikmz.uzh.ch

D. Vogler
E-Mail: d.vogler@ikmz.uzh.ch

F. Oehmer-Pedrazzi et al. (Hrsg.), *Standardisierte Inhaltsanalyse in der Kommunikationswissenschaft – Standardized Content Analysis in Communication Research*, https://doi.org/10.1007/978-3-658-36179-2_5

media type. In general, the variable "format" categorizes the outlet and is sometimes used synonymously to the variable "media type" (e.g. "Daily Newspaper", "Sunday News Paper", "Tabloids", etc.) (Bonfadelli 2002; fög – Forschungsinstitut Öffentlichkeit und Gesellschaft 2019; Rössler 2017; Strömbäck and van Aelst 2010; Udris et al. 2020). "Genre" refers to the form of presentation or content of an article (e.g. "interview", "report", "commentary", etc.) (e.g. Beam 2003; Quandt 2008a). Some authors label this variable as "section", especially when analyzing newspapers, and use the term "genre" for the social sphere addressed in the article (e.g. "politics", "economy", "sports", etc.) (Rössler 2017).

Many authors use these variables to analyze the content of newspapers (e.g. Beam 2003; Dotson et al. 2012; fög – Forschungsinstitut Öffentlichkeit und Gesellschaft 2019; Levinsen and Wien 2011), television and radio programs (e.g. fög – Forschungsinstitut Öffentlichkeit und Gesellschaft 2019; Maier et al. 2006; Seethaler, 2015) as well as news websites (e.g. Neuberger et al. 2009; Quandt 2008a, b). Even if not included in the coding process, the variable format is commonly used to select media types or outlets for the analysis (recent examples e.g. Boumans 2017; Hase et al. 2020; Vogler et al. 2020; Zerback et al. 2020). However, there are strong variations in how the variables are conceptualized and used in the studies. Within this chapter, we aim to give some general remarks on the use and operationalization of the variables, as they are important for almost every study that copes with journalistic media content.

2 "Formats" and "Genres" in the context of print media

Especially in studies of news media the collection of formal variables like "format" and "genre" are very common as they are useful variables to characterize different media outlets and forms of presentation – also when compared over time. "**Format**" and "genre" are often used as explanatory or dependent variables. In their study on soft news elements in election coverage, Strömbäck and van Aelst (2010) find that the formats, called "media types" within their study, matter and that scholars should systematically consider them as "structural antecedents" of news coverage. The authors show, for instance, that political framing is strongly dependent on media types – in both Sweden and Belgium. Examples for studies which use the variables in this sense include the Swiss Yearbook Quality of the Media (fög – Forschungsinstitut Öffentlichkeit und Gesellschaft 2019) or its Austrian equivalent on behalf of the Austrian Regulatory Authority for Broadcasting and Telecommunications (RTR) (Seethaler 2015). Both projects are based on a normative perspective on media quality and analyze in how far different media formats and genres fulfill democratic demands articulated towards news media coverage. Both studies collect the variable "media title" (or "media brand"), whereas the media type or format is categorized ex-post, which is a common practice. This means that the articles are first coded before they are categorized by media type for further comparative analyses. Seethaler et al. (2015) further differentiate the "format"

of a contribution either between print, TV, or radio. There are different approaches how the media format can be categorized. Typically, a differentiation can be made in regard to the media quality (e.g. low quality vs. high quality; tabloids vs. quality media), the publication period (e.g. daily, weekly or monthly newspapers and magazines) or the local orientation (e.g. local, regional, national) (fög – Forschungsinstitut Öffentlichkeit und Gesellschaft 2019; Levinsen and Wien 2011). For instance, Udris et al. (2020) could prove that media quality depends to a large extent on the "format" or media type.

"**Genre**" can be described as the type of presentation (e.g. "Report", "Interview", "Commentary", etc.) (Bauer 2011; fög – Forschungsinstitut Öffentlichkeit und Gesellschaft 2019; Gerhards et al. 2004; Seethaler 2015; Wolling and Arlt 2012) and can be also labelled as "content type" (Beam 2003) or "story type" (Dotson et al. 2012). The variable "genre" is, like "format", often used before the coding process to select relevant articles. For instance, when exclusively analyzing opinion pieces, excluding agency-based coverage for a study, or to select segments of articles (e.g. all articles from the politics section of a newspaper). From a theoretical point of view, a distinction regarding the "genre" of an article is important, because the different genres fulfill different journalistic functions. For instance, a report offers analytical depth and contextualization, short newslets report the main facts about an event in a brief manner, and in opinion pieces the author or journalist articulates her or his opinion on a topic.

3 "Formats" and "Genres" in the context of broadcast media

The two variables in focus are essential for conducting program analyses in the context of broadcast media, like public and private radio or television. Exemplary studies in German-speaking countries are a project of the Otto Brenner Foundation in Germany, which compared the program content of the two TV channels "SWR" and "NDR" (Trebbe 2013); the periodically repeated program analysis of the German TV channels "ARD", "ZDF", "RTL" and "Sat.1" of the IFEM Institute for Empirical Media Research (Krüger et al. 2019); a content analysis on news values in German TV programs (Maier et al. 2006); the analysis of media quality of Austrian TV channels (Seethaler 2015); and – already mentioned – the Swiss Yearbook Quality of the Media that analyses not only print media but also radio and TV outlets in Switzerland every year (fög – Forschungsinstitut Öffentlichkeit und Gesellschaft 2019).

All of the mentioned studies use at least one variable ("format" or "genre"), mostly to categorize other content variables. However, the variables are only rarely described and often taken for granted. Krüger et al. (2019) distinguish in regard to the "format" between informational content, journalistic entertainment and factual entertainment. Trebbe (2013) has a different and broader approach, as he classifies news formats in main categories, like "universal news", "regional news" and "thematic news" where sub-types of contributions can be subsumed. Also, apart from news formats, one can collect categories for other broadcast formats, like advertising, trailers and other

non-fictional formats for entertainment (Trebbe 2013). A comparison of the two studies by Krüger et al. (2019) and Trebbe (2013) shows that results differ depending on the operationalization of the variable “format” and the drawn sample. Since the two studies work with different definitions of “information” vs. “entertainment”, different results are not surprising (Maurer and Reinemann 2006, pp. 83–98). These differences illustrate the importance of clear operationalizations in content analysis and the interpretation of results. However, these variables and categories are helpful to describe channel-specific programs and their differences, e.g. when comparing public and private TV (fög – Forschungsinstitut Öffentlichkeit und Gesellschaft 2019; Seethaler 2015).

“Genre” (or frequently labelled “type of presentation”) differs in the context of broadcast media, for instance, whether the contribution is a “message of a TV/radio host”, an “interview”, “news during a film”, etc. (Maier et al. 2006), or a “documentation”, “event broadcasting” and others (Krüger et al. 2019; Trebbe 2013). These categories can be used, for instance, to analyze differences in political news coverage or between content by public and private broadcast services depending on the genre (Maier et al. 2006, p. 36). Similarly, categories for radio programs can be created. For content analyses one can either focus on journalistic content or add other genres like reports about music or call-ins from the audience (House of Research 2016).

4 “Formats” and “Genres” in the context of online media

Definitions of “formats” and “genres” in the context of online media are more diverse compared to those for print and broadcast media. Firstly, it is hard to identify which online contents fulfill the criteria of being a journalistic product because of the variety of communicating actors online. Secondly, online media are heterogeneous in regard to their content as single websites and can combine different “formats” and “genres” (Neuberger et al. 2009). Quandt (2008a) further assumed that formal characteristics of online news had been insufficiently described. Although scholars turned from printed to online news as the primary research object, the diagnosis of Quandt (2008a) remains, which, we argue, can be attributed to the very heterogenous structure of online news outlets. They can range from almost identical structures as in printed newspapers to new and innovative formats and genres (Humprecht und Esser 2018). According to Sjøvaag and Stavelin (2012, p. 215), “online research methods need to be redesigned to account for the medium-specific news features on the internet”.

Neuberger et al. (2009) suggest to firstly select media types and internet formats when analyzing the content of journalistic websites. “Format” may then refer to the media type such as “daily newspapers”, “national weekly or sunday newspapers”, “general interest magazines”, “news agency” but also “broadcast service”, as online media content can be arranged audiovisual as well. These characteristics relate to traditional media types and

can be used to compare print media content with online media content from the same outlet (e.g. Hoffman 2006; Quandt 2008a). The variable "format" can further distinguish whether the article originates from, for instance, an "online portal", an "user platform", a "search engine" or "weblog", as journalistic media content often varies from other content (Neuberger et al. 2009). In a similar way, Thorsen an Jackson (2018) focus on the type of content when analyzing online news articles and live blogs. However, the authors use the variable to distinguish between text, audio, video, image and social media content.

Quandt (2008a, b) describes a helpful approach in order to define the type of presentation (which we described as "genre" at the beginning of this book chapter). He uses the same codebook for both press and online media. The type of presentation may then refer to "traditional" types such as "interview", "lead", "report", "comment", etc. He further suggests distinguishing between the type of multi-media content (which can be subsumed under "**genre**" as well), like "video stream", "audio stream", and others. Colussi and Rocha (2020) analyzed the "journalistic genre hybridisation" of two newspapers on Facebook Live. By "hybrid genres", and in contrast to "traditional" genres as mentioned above, the authors understand the combination of different genres (such as interviews, debates, news reports) using the example of audiovisual content on Facebook.

5 Conclusion and research desiderata

Although many studies collect formal variables such as "formats" and "genres", there are large variations concerning their use and operationalization. Also, many authors rather focus on the collected content variables used in their studies than on the detailed description of formal variables. Both variables are not necessarily included in the codebook and are often directly imported as meta-information from databases like Factiva or Lexis Nexis or from web scraping tools. The process is often not documented or validated properly which makes it difficult to assess the quality of the variables. This deficit is astonishing, as the variables are among the most frequently used concepts in studies on journalistic media and often explain a lot of variance in the datasets. We, therefore, suggest that researchers should give more attention to formal variables like "format" and "genre" in their studies.

Relevant Variables in DOCA – Database of Variables for Content Analysis

Format: https://doi.org/10.34778/2za
Genre: https://doi.org/10.34778/2zb

References

Bauer, M. W. (2011). Classical Content Analysis: a Review. In M. W. Bauer & G. Gaskell (Eds.), *Qualitative Researching with Text, Image and Sound* (pp. 132–151). London: SAGE Publications Ltd.

Beam, R. A. (2003). Between daily newspapers with strong and weak market orientations. *Journalism & Mass Communication Quarterly, 80*, 368–390.

Bonfadelli, H. (2002). *Medieninhaltsforschung*. Konstanz: UVK.

Boumans, J. (2017). Subsidizing The News? *Journalism Studies, 19*(15), 2264–2282. doi:https://doi.org/10.1080/1461670x.2017.1338154

Colussi, J., & Rocha, P. M. (2020). Examining the journalistic genres hybridisation in content published by newspapers on Facebook Live. *The Journal of International Communication, 26*(1), 20–35. doi:https://doi.org/10.1080/13216597.2020.1744467

Dotson, D. M., Jacobson, S. K., Kaid, L. L., & Carlton, J. S. (2012). Media Coverage of Climate Change in Chile: A Content Analysis of Conservative and Liberal Newspapers. *Environmental Communication, 6*(1), 64–81. doi:https://doi.org/10.1080/17524032.2011.642078

fög – Forschungsinstitut Öffentlichkeit und Gesellschaft (Ed.) (2019). *Jahrbuch Qualität der Medien - Schweiz Suisse Svizzera*. Basel: Schwabe.

Gerhards, J., Roose, J., & Offerhaus, A. (2004). AttrEU: Die Europäische Union und die massenmediale Attribution von Verantwortung. Eine länder-, zeit- und medienvergleichende Untersuchung. Codebuch zur Inhaltsanalyse der EU-Berichterstatung der Süddeutschen Zeitung, der Frankfurter Allgemeinen Zeitung, der Times und des Guardian von 1994 bis 2003. Retrieved from https://www.polsoz.fu-berlin.de/soziologie/arbeitsbereiche/makrosoziologie/projekte/attribution/dateien/pdf/AttrEU_Codebuch.pdf.

Hase, V., Engelke, K. M., & Kieslich, K. (2020). The Things We Fear. Combining Automated and Manual Content Analysis to Uncover Themes, Topics and Threats in Fear-Related News. *Journalism Studies*, 1–19. doi:https://doi.org/10.1080/1461670x.2020.1753092.

Hoffman, L. H. (2006). Is Internet Content Different after All? A Content Analysis of Mobilizing Information in Online and Print Newspapers. *Journalism & Mass Communication Quarterly, 83*(1), 58–76.

House of Research. (2016). *Programmanalyse privater saarländischer Hörfunkprogramme 2016. Quantitative Inhaltsanalyse der sieben privaten Radiosender im Saarland*. Berlin: Landesmedienanstalt Saarland.

Humprecht, E., & Esser, F. (2018). Diversity in Online News. *Journalism Studies, 19*(12), 1825–1847. doi:https://doi.org/10.1080/1461670x.2017.1308229

Krüger, U. M., Zapf-Schramm, T., & Jung, M. (2019). Sendungsformen, Themen und Akteure im Nonfictionangebot von ARD, ZDF, RTL und Sat.1. *Media Perspektiven, 5*(2019), 232–252.

Levinsen, K., & Wien, C. (2011). Changing media representations of youth in the news – a content analysis of Danish newspapers 1953–2003. *Journal of Youth Studies, 14*(7), 837–851. doi:https://doi.org/10.1080/13676261.2011.607434

Maier, M., Ruhrmann, G., & Klietsch, K. (2006). *Der Wert von Nachrichten im deutschen Fernsehen. Ergebnisse einer Inhaltsanalyse 1992 - 2004*. Düsseldorf: Landesanstalt für Medien Nordrhein-Westfalen.

Maurer, M., & Reinemann, C. (2006). *Medieninhalte. Eine Einführung*. Wiesbaden: VS Verlag für Sozialwissenschaften.

Neuberger, C., Nuernbergk, C., & Rischke, M. (2009). Journalismus – neu vermessen. Die Grundgesamtheit journalistischer Internetangebote – Methode und Ergebnisse. In C. Neuberger, C. Nuernbergk, & M. Rischke (Eds.), *Journalismus im Internet* (pp. 197–230). Wiesbaden: VS Verlag für Sozialwissenschaften.

Quandt, T. (2008a). Neues Medium, alter Journalismus? Eine vergleichende Inhaltsanalyse tagesaktueller Print- und Online-Nachrichtenangebote. In T. Quandt & W. Schweiger (Eds.), *Journalismus online - Partizipation oder Profession?* (pp. 131–155). Wiesbaden: VS Verlag für Sozialwissenschaften.

Quandt, T. (2008b). (No) News on the World Wide Web? *Journalism Studies, 9*(5), 717–738. doi:https://doi.org/10.1080/14616700802207664

Rössler, P. (2017). *Inhaltsanalyse* (3 ed.). Konstanz/München: UVK Verlagsgesellschaft.

Rössler, P., & Geise, S. (2013). Standardisierte Inhaltsanalyse: Grundprinzipien, Einsatz und Anwendung. In *Handbuch standardisierte Erhebungsverfahren in der Kommunikationswissenschaft* (pp. 269–287).

Seethaler, J. (2015). Qualität des tagesaktuellen Informationsangebots in den österreichischen Medien. Eine crossmediale Untersuchung. *Schriftenreihe der Rundfunk und Telekom Regulierungs-GmbH, 1/2015*.

Sjøvaag, H., & Stavelin, E. (2012). Web media and the quantitative content analysis: Methodological challenges in measuring online news content. *Convergence: The International Journal of Research into New Media Technologies, 18*(2), 215–229. doi:https://doi.org/10.1177/1354856511429641.

Strömbäck, J., & van Aelst, P. (2010). Exploring Some Antecedents of the Media's Framing of Election News: A Comparison of Swedish and Belgian Election News. *The International Journal of Press/Politics, 15*(1), 41–59. doi:https://doi.org/10.1177/1940161209351004.

Thorsen, E., & Jackson, D. (2018). Seven Characteristics Defining Online News Formats. *Digital Journalism, 6*(7), 847-868. doi:https://doi.org/10.1080/21670811.2018.1468722.

Trebbe, J. (2013). *Zwischen Boulevard und Ratgeber-TV. Eine vergleichende Programmanalyse von SWR und NDR. OBS-Arbeitspapier Nr. 12*. Frankfurt am Main: Otto Brenner Stiftung.

Udris, L., Eisenegger, M., Vogler, D., Schneider, J., & Häuptli, A. (2020). Mapping and Explaining Media Quality: Insights from Switzerland's Multilingual Media System. *Cogitatio, 8*(3), 258–269.

Vogler, D., Udris, L., & Eisenegger, M. (2020). Measuring Media Content Concentration at a Large Scale Using Automated Text Comparisons. *Journalism Studies*, 1-20. doi:https://doi.org/10.1080/1461670x.2020.1761865.

Wolling, J., & Arlt, D. (2012). Codebuch zur inhaltsanalytischen Untersuchung der Weltklimakonferenz 2009 in den Medien. Retrieved from https://www.db-thueringen.de/servlets/MCRFileNodeServlet/dbt_derivate_00025455/ilm1-2012200112.pdf.

Zerback, T., Reinemann, C., Van Aelst, P., & Masini, A. (2020). Was Lampedusa a key Event for Immigration News? An Analysis of the Effects of the Lampedusa Disaster on Immigration Coverage in Germany, Belgium, and Italy. *Journalism Studies, 21*(6), 748–765. doi:https://doi.org/10.1080/1461670x.2020.1722730.

Dr. Lisa Schwaiger is a Postdoctoral Scholar at the Department of Communication and Media Research (IKMZ) and the Research Center for the Public Sphere and Society (fog) at the University of Zurich. Her research focuses on the transformation of the public sphere, digital (counter-)publics, religion and media, and qualitative methods.

Dr. Daniel Vogler is the Research Director of the Research Center for the Public Sphere and Society (fög) at the University of Zurich, and Research Associate at the Department of Communication and Media Research (IKMZ) at the University of Zurich. His research focuses on public relations, journalism, and online communication.


cc
BY



Content Analysis in the Research on Reporting Styles

Miriam Klein

1 Introduction

Journalistic reporting styles refer above all to *how* journalistic content is presented. On the one hand, reporting styles are the subject of practical textbooks which contain instructions for future journalists on how to apply certain reporting styles in practice (for Germany, e.g., Mast 2018; Ruß-Mohl 2016). On the other hand, reporting styles are the subject of scientific studies—the present chapter is based on this area.

From the perspective of democratic theory, the motivation to explore reporting styles is strongly normative. Since the media have the task of providing citizens with information, any deviation from factual or neutral reporting is usually seen as a potential threat to well-informed citizens and thus to democracy. Based on this way of interpretation, trends such as *news softening* or *horse race/game framing coverage*—as a result of economic constraints and the associated increasing orientation towards the audience (van Aelst et al. 2017; see also Haim 2019)—are increasingly being observed. Furthermore, it is feared that the growing importance of social media for journalism (Newman 2020) will reinforce these trends (e.g., Lischka 2021; Steiner 2016; Welbers and Opgenhaffen 2019), resulting in an even stronger audience orientation and adaptation to the so-called "social media logic" (van Dijck and Poell 2013). More generally, digital environments create completely new technological conditions, which

M. Klein (✉)
Institut für Publizistik, Johannes Gutenberg-Universität Mainz, Mainz, Germany
E-Mail: miriam.c.klein@gmail.com

F. Oehmer-Pedrazzi et al. (Hrsg.), *Standardisierte Inhaltsanalyse in der Kommunikationswissenschaft – Standardized Content Analysis in Communication Research,* https://doi.org/10.1007/978-3-658-36179-2_6

also affect reporting styles. This includes, inter alia, more visualization, but also more live reporting (Huxford 2007) and the integration of more multimedia and interactive elements (Haim 2019).

2 Main Constructs

"Reporting styles" as a research object is multifaceted and can be assigned to different research areas—for example, research on tabloidization or research on objectivity in journalism. The most important fields of research are outlined in more detail in this chapter. When discussing research on reporting styles, a distinction is made first between 1) formal reporting styles and 2) content-related or stylistic reporting styles (by using certain linguistic means or highlighting certain aspects).

2.1 Formal Reporting Styles

The identification of the **formal reporting style**, that is, the form of news presentation or rather the journalistic genre, is one of the more common categories within codebooks for the study of news journalism. Separating news stories and commentaries is useful, for example, for research conducted on the norm of separating news and opinion (Schönbach 1977). There are several reporting styles to be distinguished:

1. *News story*. A news story is the "standard format" (Weischenberg and Birkner 2008, p. 3277) in news journalism. The news story focuses only on the most important facts and presents them in order of importance. This form is called "inverted pyramid" (Pöttker 2005, p. 51; Weischenberg and Birkner 2008, p. 3278) and has its origins in nineteenth century American journalism (Pöttker 2005, p. 52). This way of news writing makes it easy to shorten the news story from the end (e.g., when taking over agency material).
2. *Commentary*. A commentary is a "genre of journalism that provides interpretations and opinions on current events, rather than factual reporting" (Djerf-Pierre 2008, p. 566). While news stories primarily have an informative function, commentaries play an important role in the formation of public opinion (Djerf-Pierre 2008, p. 567). Apart from the classic "commentary", the journalist's opinion can also be found in similar news formats such as editorials or columns (Mast 2018). However, the occurrence of comments and the separation of news and comments vary between countries (Djerf-Pierre 2008, p. 567): While US journalists apply a more neutral style, journalists in southern Europe follow a more advocacy tradition and mix commentaries more with factual news coverage.
3. *Feature journalism*. Feature journalism is a journalistic format that differs from the classic news format in that it does not use the inverted pyramid, but is rather

structured chronologically (Steensen 2009). Furthermore, it often contains subjective descriptions and reflections and, as it often portrays people, is rather personal and emotional (Steensen 2009). Therefore, feature journalism is a mixture between opinion-based and objective news formats.

4. *Interview*. The interview is a journalistic format consisting of questions (interviewer, journalist) and answers (interviewee, most often public officials such as politicians or experts) (Clayman 2008). The first printed interview appeared in 1859 in *New York Tribune* (Schudson 1995, pp. 73–74). While interviews were initially criticized as "artificial" and "intrusive" (Clayman 2008; Schudson 1994), they have become very important today. With the help of increasingly direct and aggressive questions, journalists also manage to stop the interviewees from using the format for mere self-representation (Clayman 2008; Schudson 1994).

Codebooks on news journalism generally distinguish between these four news formats (e.g., Kösters 2020; see also Magin 2006 with some additional news formats). Other codebooks distinguish between factual and opinionated news formats (e.g., Seethaler 2015). This distinction has become more difficult, however, as factual and opinionated formats have increasingly blurred (Schäfer-Hock 2018)—not only in private television and tabloid media, but also in the quality press, where background reporting and commentary often merge (Ruß-Mohl 2016, p. 68) (see also the trend towards more "interpretive journalism", Salgado and Strömbäck 2012).

2.2 Content-Related or Stylistic Reporting Styles

Apart from the distinction of journalistic news formats, there are several reporting styles that deal with specific ways of *how* news is covered. This chapter will take up some of the more common concepts and briefly outline them.

1. **Objectivity**. Objectivity is a journalistic goal (Cunningham 2003) which is both difficult to achieve and difficult to measure (Neuberger 2017; Ruß-Mohl 2016). However, it is an important aspect of journalistic professionalism and contains criteria such as neutrality or the negation of journalistic subjectivity, the fair representation of opposed opinions, but also telling the truth, providing all relevant information and being transparent (Bentele 1988; Donsbach and Klett 1993; Hackett 2008; Ruß-Mohl 2016). Many studies in this field of research, often in the context of news performance, analyze how *neutral/impartial or subjective/partisan* journalists cover specific issues, thereby referring to the concept of impartiality (Schönhagen 1998).
2. *Horse race coverage/game framing*. Horse race coverage or game framing refers to political reporting that uses sports metaphors and sees politics as a race (of ideas, candidates) rather than focusing on factual content (Brettschneider 2008, p. 2137). This reporting style is a specific feature of election campaign reporting. Journalists

focus on candidates instead of topics, as well as on polls and often over-interpret the smallest changes in popularity ratings and try to forecast the results (Brettschneider 2008; Patterson 2005). While the horse race reporting style is often criticized for trivializing election campaigns, it is also argued that it helps to increase public interest (Broh 1980, p. 515). Studies show that horse race reporting is particularly common for American election campaigns (Brettschneider 1996; Farnsworth and Lichter 2003).

3. *Storytelling*. Storytelling describes a reporting style in which news is enriched with narrative elements to make it more interesting, meaningful and attractive for the audience (Boesman and Costera Meijer 2018, p. 997; Früh 2014, p. 93). While some journalists consider storytelling to be the "opposite of good journalism", others rather see it as a "toolkit" to "present the facts in a good way" (Boesman and Costera Meijer 2018, pp. 1001–1002). Storytelling is also an important factor in online journalism (e.g. long-form journalism with many multimedia elements) (Jacobson et al. 2016; Meadows 2003).
4. **News softening**. The news softening, or tabloidization, describes the adaption of tabloid standards, particularly by elite or so-called "quality" media (Esser 1999; Lefkowitz 2018; Magin 2019). It is often seen as a result of increased competitive and economic pressure and the struggle for public attention (Magin 2019; Skovsgaard 2014). However, the concept of news softening is rather a conglomerate of several concepts (for an overview see Otto et al. 2017; Reinemann et al. 2012) and therefore describes several reporting styles which are typical for tabloid media. Reinemann et al. (2012) summarize them in three sub-dimensions. The first sub-dimension refers to the *topic* of a news item—soft (entertainment, crime etc.) vs. hard (mainly politics) news—, and the other two sub-dimensions refer to specific reporting styles: The *focus dimension* means the accentuation of certain aspects within an article, for example, the focus on the individual (soft news) vs. the societal relevance or the difference between episodic framing (soft news; focus on the event itself) vs. thematic framing (focus on the thematic context). The *style dimension* is concerned with verbal or also (audio)visual stylistic elements. The concrete indicators for news softening in this sub-dimension vary across different studies. However, emotionalization plays a particularly important role in most of them (Reinemann et al. 2012). This includes the reporting on or visual presentation of emotions (e.g., showing crying or laughing people), but also affective wording (see also sentiment analyses, next chapter). The latter is achieved through certain linguistic elements, such as emotionalising metaphors, a short-term sentence structure, dramatizing or exaggerating adjectives etc. Another important feature is the appearance of the journalists' points of view (personal reporting; Reinemann et al. 2012; cf. objectivity norm, described further up). Apart from this, some studies also regard colloquial language or a loose language as a characteristic for softened news (e.g., Leidenberger 2015; Steiner 2016) or also use a narrative presentation (e.g., Donsbach and Büttner 2005) or the emphasis on conflicts (e.g., Donsbach and Büttner 2005; Leidenberger 2015) as indicators of softened news. Since the debate initially refers to the adaption of tabloid news standards, analyses therefore traditionally focus on newspapers

(Esser 1999; Lefkowitz 2018; Magin 2019). However, research has extended to other types of media such as television (e.g., Donsbach and Büttner 2005; Grabe et al. 2001; Vettehen et al. 2008), online media outlets (Gran 2015; Karlsson 2016) and even social media (Lischka and Werning 2017; Steiner 2016) or cross-media (Reinemann et al. 2016).

3 New Research Designs and Combination of Methods

So far, the outlined concepts and indicators are usually measured using manual content analyses (e.g., Donsbach and Büttner 2005; Magin 2019; Seethaler 2015). However, like in other research areas, first steps towards automated analyses are taken. Boumans and Trilling (2016) give an overview of different approaches, ranging from strongly inductive (unsupervised machine-learning) to strongly deductive (dictionary-based methods) orientations. For each approach, they present examples from journalism research, also including reporting styles.

One of these examples is sentiment analysis. This analytical approach belongs to the field of computational linguistics and "aims at identifying and classifying subjective language" (van Atteveldt et al. 2008, p. 78). While most research in this field is based on a fixed list of words (dictionary-based approach) (Boumans and Trilling 2016; van Atteveldt et al. 2008), machine-learning approaches additionally help to analyze the context in which specific words appear (van Atteveldt et al. 2008). With regard to a similar research question, Welbers and Opgenhaffen (2019) also choose a computer-based approach. They use a lexicon for subjective adjectives and a lexicon for emoticons to investigate to which extent subjective language appears within status messages, headlines and leads of journalistic Facebook posts. Correspondingly, in her study on the tabloidization of German and Austrian elite newspapers, Magin (2019) examines the occurrence of emotional terms. She bases her study on a list (Berlin Affective word List Reloaded: Võ et al. 2009), the terms of which have previously been examined by 200 people with regard to their valence and strength of arousal. However, computer-based analyses of reporting styles are not limited to the identification of individual subjective terms. On the basis of machine-learning, those analyses can identify more complex structures and thus, for example, investigate framing (e.g., Burscher et al. 2014).

Research on reporting styles also benefits from combining findings from content analyses with other methods. Mixed-methods designs can, for example, help to identify journalists' motives or strategies for using specific reporting styles or to determine the effects on the audience more precisely. For example, Glogger (2019) uses an online survey to examine the extent to which the role expectations of journalists can affect the use of the soft news style In another study, Lischka (2021) analyzes reporting styles used within journalistic news posts on Facebook, based on qualitative interviews and a quantitative survey with social media editors from Finland and Switzerland. Furthermore, Grabe et al. (2000) use an experiment to investigate the effect that *tabloid* reporting style has on, for example, the memory of the recipients.

4 Research Desiderata

Due to increasing commercialisation and competitive pressure, audience orientation seems more important than ever (Haim 2019). For this reason, some authors fear that news media are increasingly focusing on how news is presented (*reporting styles*) instead of the content of news, which could be harmful to democracy (Blumler and Gurevitch 1995; Sparks 2000). Social media is particularly criticized for changing journalistic practices. However, it is still unclear to what extent news media adapt to the social media logic (van Dijck and Poell 2013) and neglect professional standards for the sake of attention-oriented reporting styles. With regard to news softening, first studies (e.g., Lischka 2021; Steiner 2016; Welbers and Opgenhaffen 2019) indicate that there is no complete departure from professional standards. However, future research should pay more attention to how news media adapt to communicative developments such as the increased importance of social media for news consumption. In addition, more studies should investigate the extent to which criticism of certain reporting styles is justified and what positive effects these reporting styles can have (e.g., Bernhard 2012; Frey 2014).

Furthermore, outlining the different concepts and indicators of reporting styles in this article has shown that journalistic reporting styles are very complex and thus not easy to measure. If researchers want to apply automated methods (e.g., machine-learning) to enlarge their data set, they may first need a sufficient amount of (manually coded) training data (e.g., see Burscher et al. 2014 on the importance of the amount of training material for the performance of the classifiers). For this reason, it is not only important that researchers share their data (see Dienlin et al. 2021 for the call for open science), but also that they use the same instruments (e.g., see Reinemann et al. 2012, p. 225 on the problem of "conceptual fuzziness" with respect to news softening) so that their data can be used by other researchers.

Relevant Variables in DOCA—Database of Variables for Content Analysis

Formal reporting style: https://doi.org/10.34778/2r
Impartiality: https://doi.org/10.34778/2s
Soft news/tabloidization: https://doi.org/10.34778/2t

References

Bentele, G. (1988). Wie objektiv können Journalisten sein? [How objective can journalists be?]. In L. Erbring, S. Ruß-Mohl, B. Seewald, & B. Sösemann (Eds.), *Medien ohne Moral: Variationen über Journalismus und Ethik* (pp. 196–225). Berlin: Argon.

Bernhard, U. (2012). *Infotainment in der Zeitung: Der Einfluss unterhaltungsorientierter Gestaltungsmittel auf die Wahrnehmung und Verarbeitung politischer Informationen* [Infotainment in the newspaper. The influence of entertainment-oriented style elements on the perception and processing of political information]. Baden-Baden: Nomos.

Blumler, J. G., & Gurevitch, M. (1995). *The crisis of public communication*. London, New York: Routledge.

Boesman, J., & Costera Meijer, I. (2018). Nothing but the facts? *Journalism Practice*, *12*(8), 997–1007.

Boumans, J. W., & Trilling, D. (2016). Taking stock of the toolkit: An overview of relevant automated content analysis approaches and techniques for digital journalism scholars. *Digital Journalism*, *4*(1), 8–23.

Brettschneider, F. (1996). Wahlumfragen und Medien – Eine empirische Untersuchung der Presseberichterstattung über Meinungsumfragen vor den Bundestagswahlen 1980 bis 1994 [Election polls and the media – An empirical study of press coverage of opinion polls prior to the 1980 to 1994 federal elections]. *Politische Vierteljahresschrift*, *37*(3), 475–493.

Brettschneider, F. (2008). Horse race coverage. In W. Donsbach (Ed.), *The International Encyclopedia of Communication* (pp. 2137–2139). Chichester: Wiley.

Broh, C. A. (1980). Horse-race journalism: Reporting the polls in the 1976 presidential election. *The Public Opinion Quarterly*, *44*(4), 514–529.

Burscher, B., Odijk, D., Vliegenthart, R., de Rijke, M., & de Vreese, C. H. (2014). Teaching the computer to code frames in news: Comparing two supervised machine learning approaches to frame analysis. *Communication Methods and Measures*, *8*(3), 190–206.

Clayman, S. E. (2008). Interview as journalistic form. In W. Donsbach (Ed.), *The International Encyclopedia of Communication* (pp. 2509–2513). Chichester: Wiley.

Cunningham, B. (2003). Re-thinking objectivity: In a world of spin, our awkward embrace of an ideal can make us passive recipients of the news. *Columbia Journalism Review*. https://archives.cjr.org/feature/rethinking_objectivity.php

Dienlin, T., Johannes, N., Bowman, N. D., Masur, P. K., Engesser, S., Kümpel, A. S., … de Vreese, C. (2021). An agenda for open science in communication. *Journal of Communication, 71*(1), 1–26.

Djerf-Pierre, M. (2008). Commentary. In W. Donsbach (Ed.), *The International Encyclopedia of Communication* (pp. 566–568). Chichester: Wiley.

Donsbach, W., & Büttner, K. (2005). Boulevardisierungstrend in deutschen Fernsehnachrichten: Darstellungsmerkmale der Politikberichterstattung vor den Bundestagswahlen 1983, 1990 und 1998 [Trends of tabloidization in German TV news: How the news broadcast presented politics before the general elections in 1983, 1990, and 1998]. *Publizistik*, *50*(1), 21–38.

Donsbach, W., & Klett, B. (1993). Subjective objectivity: How journalists in four countries define a key term of their profession. *Gazette*, *51*(1), 53–83.

Esser, F. (1999). `Tabloidization' of news: A comparative analysis of Anglo-American and German press journalism. *European Journal of Communication*, *14*(3), 291–324.

Farnsworth, S. J., & Lichter, S. R. (2003). *The nightly news nightmare: Media coverage of U.S. presidential elections, 1988–2008*. Lanham et al.: Rowman & Littlefield.

Frey, F. (2014). Wirkung des Narrativen: Ein systematischer Forschungsüberblick zu Effekten narrativer Kommunikationsformen [Effect of the narrative: A systematic research overview of the effects of narrative forms of communication]. In W. Früh & F. Frey (Eds.), *Narration und Storytelling: Theorie und empirische Befunde.* (pp. 120–192). Köln: Herbert von Halem.

Früh, W. (2014). Narration und Storytelling [Narration and storytelling]. In W. Früh & F. Frey (Eds.), *Narration und Storytelling: Theorie und empirische Befunde* (pp. 63–119). Köln: Herbert von Halem.

Glogger, I. (2019). Soft spot for soft news? Influences of journalistic role conceptions on hard and soft news coverage. *Journalism Studies*, *20*(16), 2293–2311.

Grabe, M. E., Zhou, S., & Barnett, B. (2001). Explicating sensationalism in television news: Content and the bells and whistles of form. *Journal of Broadcasting & Electronic Media*, *45*(4), 635–655.

Grabe, M. E., Zhou, S., Lang, A., & Bolls, P. D. (2000). Packaging television news: The effects of tabloid on information processing and evaluative responses. *Journal of Broadcasting & Electronic Media*, *44*(4), 581–598.

Gran, C. S. (2015). *Tabloidisation of the Norwegian news media: A quantitative analysis of print and online newspaper platforms* (Doctoral dissertation, University of London). Retrieved from https://www.lse.ac.uk/media-and-communications/assets/documents/research/msc-dissertations/2014/Celine-Storstad-Gran-LSE-MediaSeries-AF.pdf.

Hackett, R. A. (2008). Objectivity in reporting. In W. Donsbach (Ed.), *The International Encyclopedia of Communication* (pp. 3345–3350). Chichester: Wiley.

Haim, M. (2019). *Die Orientierung von Online-Journalismus an seinen Publika: Anforderung, Antizipation, Anspruch* [The orientation of online journalism towards its audiences: Demands, anticipation, expectations]. Wiesbaden: Springer.

Huxford, J. (2007). The proximity paradox: Live reporting, virtual proximity and the concept of place in the news. *Journalism: Theory, Practice & Criticism*, *8*(6), 657–674.

Jacobson, S., Marino, J., & Gutsche, R. E. (2016). The digital animation of literary journalism. *Journalism: Theory, Practice & Criticism*, *17*(4), 527–546.

Karlsson, M. B. (2016). Goodbye politics, hello lifestyle: Changing news topics in tabloid, quality and local newspaper websites in the U.K. and Sweden from 2002 to 2012. *Observatorio*, *10*(4), 150–165.

Kösters, R. (2020). *Medien als Mittler im Konflikt? Der Streit um die Migration im Spiegel der Berichterstattung* [Media as intermediaries in conflicts? The debate on migration in media coverage]. (Doctoral dissertation, Heinrich-Heine-University Düsseldorf). Retrieved from https://d-nb.info/1203369883/34

Lefkowitz, J. (2018). "Tabloidization" or dual-convergence: Quoted speech in tabloid and "quality" British newspapers 1970–2010. *Journalism Studies*, *19*(3), 353–375.

Leidenberger, J. (2015). *Boulevardisierung von Fernsehnachrichten: Eine Inhaltsanalyse deutscher und französischer Hauptnachrichtensendungen* [Tabloidization of TV news: A content analysis comparing German and French main newscasts]. Wiesbaden: Springer.

Lischka, J. A. (2021). Logics in social media news making: How social media editors marry the Facebook logic with journalistic standards. *Journalism, 22*(2), 430–447.

Lischka, J. A., & Werning, M. (2017). Wie Facebook den Regionaljournalismus verändert: Publikums- und Algorithmusorientierung bei der Facebook-Themenselektion von Regionalzeitungen [How Facebook is changing regional journalism: Audience and algorithm orientation in the Facebook topic selection of regional newspapers]. *kommunikation@gesellschaft*, *18*.

Magin, M. (2006). *Qualitätszeitungen in Deutschland und Österreich: Ein Vergleich. Codebuch* [Quality newspapers in Germany and Austria: A comparison. Codebook].

Magin, M. (2019). Attention, please! Structural influences on tabloidization of campaign coverage in German and Austrian elite newspapers (1949–2009). *Journalism*, *20*(12), 1704–1724.

Mast, C. (Hrsg.). (2018). *ABC des Journalismus: Ein Handbuch* [ABC of journalism: A manual]. (13. ed.). Köln: Herbert von Halem.

Meadows, D. (2003). Digital storytelling: Research-based practice in new media. *Visual Communication*, *2*(2), 189–193.

Neuberger, C. (2017). Journalistische Objektivität. Vorschlag für einen pragmatischen Theorierahmen [Journalistic objectivity: Proposal for a pragmatic theoretical framework]. *M&K Medien & Kommunikationswissenschaft*, *65*(2), 406–431.

Newman, N. (2020). *Journalism, media, and technology trends and predictions 2020*. Oxford: Reuters Institute for the Study of Journalism.

Otto, L., Glogger, I., & Boukes, M. (2017). The softening of journalistic political communication: A comprehensive framework model of sensationalism, soft news, infotainment, and tabloidization. *Communication Theory*, *27*(2), 136–155.

Patterson, T. E. (2005). Of polls, mountains: U.S. journalists and their use of election surveys. *Public Opinion Quarterly*, *69*(5), 716–724.
Pöttker, H. (2005). The news pyramid and its origin from the American Journalism in the 19th Century: A professional approach and an empirical inquiry. In S. Høyer & H. Pöttker (Eds.), *Diffusion of the news paradigm 1850–2000* (pp. 51–64). Göteborg: Nordicom.
Reinemann, C., Stanyer, J., & Scherr, S. (2016). Hard and soft news. In C. H. de Vreese, F. Esser, & N. Hopman (Eds.), *Comparing political journalism* (pp. 131–149). London, New York: Routledge.
Reinemann, C., Stanyer, J., Scherr, S., & Legnante, G. (2012). Hard and soft news: A review of concepts, operationalizations and key findings. *Journalism*, *13*(2), 221–239.
Ruß-Mohl, S. (2016). *Journalismus: Das Lehr- und Handbuch* [Journalism: The textbook and manual]. (3. ed.). Frankfurt/Main: Frankfurter Allgemeine.
Salgado, S., & Strömbäck, J. (2012). Interpretive journalism: A review of concepts, operationalizations and key findings. *Journalism: Theory, Practice & Criticism*, *13*(2), 144–161.
Schäfer-Hock, C. (2018). *Journalistische Darstellungsformen im Wandel: Eine Untersuchung deutscher Tageszeitungen von 1992 bis 2012* [Changing forms of journalistic reporting: A study of German daily newspapers from 1992 to 2012]. Wiesbaden: Springer.
Schönbach, K. (1977). *Trennung von Nachricht und Meinung: Empirische Untersuchung eines journalistischen Qualitätskriteriums* [Separation of news and opinion: Empirical investigation of a journalistic quality criterion]. Freiburg et al.: Alber.
Schönhagen, P. (1998). *Unparteilichkeit im Journalismus: Tradition einer Qualitätsnorm* [Impartiality in journalism: Tradition of a quality standard]. Tübingen: Niemeyer.
Schudson, M. (1994). Question authority: A history of the news interview in American Journalism, 1860s–1930s. *Media, Culture & Society*, *16*(4), 565–587.
Schudson, M. (1995). *The power of news*. Cambridge et al.: Harvard University Press.
Seethaler, J. (2015). *Qualität des tagesaktuellen Informationsangebots in den österreichischen Medien: Eine crossmediale Untersuchung* [News media quality in Austria: A crossmedia analysis]. Rundfunk und Telekom Regulierungs-GmbH. Retrieved from https://www.rtr.at/medien/aktuelles/publikationen/Publikationen/SchriftenreiheNr12015.de.html.
Skovsgaard, M. (2014). A tabloid mind? Professional values and organizational pressures as explanations of tabloid journalism. *Media, Culture & Society*, *36*(2), 200–218.
Sparks, C. (2000). Introduction: The panic over tabloid news. In C. Sparks & J. Tulloch (Eds.), *Tabloid Tales: Global debates over media standards.* (pp. 1–40). Lanham et al.: Rowman & Littlefield.
Steensen, S. (2009). Online feature journalism: A clash of discourses. *Journalism Practice*, *3*(1), 13–29.
Steiner, M. (2016). Boulevardisierung goes Facebook? Ein inhaltsanalytischer Vergleich politischer Nachrichten von tagesschau, heute, RTL Aktuell und Sat.1 Nachrichten im Fernsehen und auf Facebook [Tabloidization goes Facebook? A content-analytical comparison of political news from tagesschau, heute, RTL Aktuell and Sat.1 news on television and Facebook]. In L. Leißner, H. Bause, & L. Hagemeyer (Eds.), *Politische Kommunikation – neue Phänomene, neue Perspektiven, neue Methoden* (pp. 27–46). Berlin: Frank & Timme.
van Aelst, P., Strömbäck, J., Aalberg, T., Esser, F., de Vreese, C., Matthes, J., … Stanyer, J. (2017). Political communication in a high-choice media environment: A challenge for democracy? *Annals of the International Communication Association*, *41*(1), 3–27.
van Atteveldt, W., Kleinnijenhuis, J., Ruigrok, N., & Schlobach, S. (2008). Good news or bad news? Conducting sentiment analysis on Dutch text to distinguish between positive and negative relations. *Journal of Information Technology & Politics*, *5*(1), 73–94.

van Dijck, J., & Poell, T. (2013). Understanding social media logic. *Media and Communication, 1*(1), 2–14

Vettehen, P. H., Nuijten, K., & Peeters, A. (2008). Explaining effects of sensationalism on liking of television news stories: The role of emotional arousal. *Communication Research*, *35*(3), 319–338.

Võ, M. L.-H., Conrad, M., Kuchinke L., Urton, K., Hofmann, M. J., & Jacobs, A. M. (2009) The Berlin Affective Word List Reloaded (BAWL-R). *Behavior Research Methods 41*(2), 534–538.

Weischenberg, S., & Birkner, T. (2008). News story. In W. Donsbach (Ed.), *The International Encyclopedia of Communication* (pp. 3277–3281). Chichester: Wiley.

Welbers, K., & Opgenhaffen, M. (2019). Presenting news on social media: Media logic in the communication style of newspapers on Facebook. *Digital Journalism*, *7*(1), 45–62.

Miriam Klein is a research associate and PhD student at the Department of Communication at the Johannes Gutenberg University of Mainz, Germany. Her research interests focus on media performance, particularly media diversity and news softening, but also include news consumption in new media environments.





Content Analysis in the Research Field of News Performance

Edda Humprecht

1 Introduction

Research on news performance is rooted in normative ideas of the public sphere and expectations about the benefits of the news media for individuals and society (McQuail 1992). News performance is a key concept in communication science with a long tradition of research (Eisenegger et al. 2010; Ferree et al. 2002; McQuail 1992). While earlier studies mainly focused on print media, research in the last decade has increasingly focused on online content and participatory journalism (Burggraaff and Trilling 2020; Humprecht 2016; Rowe 2015). The underlying assumption is that news performance has declined in the digital age and that citizens are increasingly poorly informed (or disinformed) (van Aelst et al. 2017). Potential drivers for this development are seen in the increasing commercialization, the rise of new and alternative media, and changed habits of media use (Humprecht and Udris 2019). Against this background, scholars are interested in long-term changes in news content and increasingly apply longitudinal designs in research on news performance (Vogler et al. 2019).

Another recent trend is cross-national comparative research (de Vreese et al. 2017). However, there are still relatively few studies comparing more than two countries. Comparative designs allow for contextualizing the effects of global phenomena such as the globalization and commercialization of media markets on news performance

E. Humprecht (✉)
Department of Sociology and Political Science, Norwegian University of Science and Technology, Trondheim, Norwegen
E-Mail: e.humprecht@ikmz.uzh.ch

F. Oehmer-Pedrazzi et al. (Hrsg.), *Standardisierte Inhaltsanalyse in der Kommunikationswissenschaft – Standardized Content Analysis in Communication Research*, https://doi.org/10.1007/978-3-658-36179-2_7

(Humprecht and Esser 2018b). Moreover, such designs help researchers to identify country-specific drivers for changes in news performance (Humprecht and Udris 2019).

Finally, certain aspects of news performance, such as diversity, have recently been studied in new ways, e.g. in forms of diversity created by algorithmic recommenders (Möller et al. 2018). These new fields of research underline the topicality of this traditional research area, which is constantly evolving.

2 Frequent Designs

News performance has traditionally been investigated in communication studies using quantitative, manual content analysis (Ferree et al. 2002; Imhof 2010; Neuberger 2018). Those studies focus on the analysis of political reporting, often during election campaigns, on specific political issues, or routine reporting (Albæk et al. 2017; de Vreese and Boomgaarden 2012). More recent studies on news performance also apply computational approaches or combinations of manual and automated approaches; however, these approaches are still comparatively rare (Boumans and Trilling 2016; Karlsson and Sjøvaag 2016; Scherr et al. 2019). Additionally, manual content analysis is frequently combined with other methods, such as expert interviews (Sehl 2013) and surveys (Engesser 2012). Current research increasingly includes digital trace data in order to make statements about the reach of certain media content (Burggraaff and Trilling 2020).

The vast majority of studies on news performance are single-country studies. Thus, the generalization of research findings is difficult because of their varying understanding of normative ideals related to the news media and, accordingly, the nature of news performance. Thus, scholarship has called for more cross-national research on news performance that makes explicit their underlying normative foundations. A key study in this area is that of Ferree et al. (2002). The study compares the discourse on abortion regulation in the US and Germany and links the results to different images of an ideal public sphere. Comparative research on news performance often focuses on transnational developments, such as the digitalization, commercialization, and mediatization of politics (Aalberg et al. 2013; Benson and Hallin 2007; Strömbäck and Esser 2014). Furthermore, commercialization has studied across different types of news outlets. Various ownership types have been found to differ regarding their profit orientation, which has been found to be reflected in news performance (Benson et al. 2018; Humprecht and Esser 2018a).

3 Main Constructs

Empirical studies investigating news performance sometimes use the term 'quality' when refereeing to news performance (Schatz and Schulz 1992). However, the notion of quality is controversial because it heavily depends on cultural and political contexts.

Quality can be understood differently and examined from different perspectives, namely, the perspective of consumers, media organizations, or society as a whole. McQuail (1992) argues that news performance is a more appropriate concept to investigate the ‘quality’ of media content. He links this concept to the functions of public communication and mass media in democracies rooted in normative theories of the news media. These theories refer to the value of news content for the audience in democratic decision-making. In other words, different news media functions can be accounted for and interpreted in the context of their institutional environments. Based on this understanding of news performance, research evaluates the media’s output in the light of its democratic functions.

Following this line of thought, scholars have defined key elements underlying the theoretical assumption of news performance linked to functions of democracy (Benson 2013; de Vreese et al. 2016; Humprecht 2016; Imhof 2010). In the following, frequently used constructs in studies using content analysis are discussed.

1. **Diversity**: The concept of diversity is frequently linked to the information function of the media and the idea that the news media should provide a wide range of relevant information (Christians et al. 2009). More recent research has focused on diversity in the context of algorithmic recommenders (Möller et al. 2018) and social media platforms (Steiner et al. 2019). Scholars frequently analyze the diversity of speakers (Benson and Wood 2015; Humprecht and Esser 2018a; Steiner et al. 2019), viewpoints (Baden and Springer 2014; Ho and Quinn 2009; Masini et al. 2018), and topics (Napoli and Gillis 2008; van Hoof et al. 2014). The diversity of speakers is frequently measured with actor lists, which are developed for their respective contexts (e.g. candidates in national elections, government representatives in different countries, different types of political and public actors, etc.). Viewpoint diversity is often measured by analyzing various frames or interpretations of the same issues (Baden and Springer 2015). Finally, topic diversity is measured either by using predefined topic lists or by employing topic modeling, for example LDA models (van der Meer 2016). To measure the distribution of different categories in content analysis, diversity indices are frequently used, e.g. the Shannon entropy index (Napoli and Gillis 2008).
2. *Hard news vs. soft news:* The provision of hard news has been theoretically linked to the accountability function of news media (Cushion 2012; McQuail 2010). The idea is that the news media hold political actors and institutions accountable to the public by providing in-depth and background information. Reinemann et al. (2012) suggest three dimensions for the measurement of hard news, namely focus, topic, and style. The focus dimension refers to specific aspects of events or topics, namely the societal vs. individual relevance of a covered topic as well as thematic vs. episodic framing. The topic dimension is operationalized by the political substance of the covered topics, e.g., the mentioning of authorities, societal actors, the substance of decisions, and affected groups. Finally, the style dimension refers to the way events

or topics are presented, as reflected in the personalization (impersonal vs. personal reporting) and emotionalization (emotional vs. unemotional reporting) of news coverage

3. *Analytical depth:* Similar to the hard news/soft news concept, analytical depth presents the idea that news media should provide in-depth information to help citizens understand why and how political decisions are made (Benson 2011). Frequently used operationalizations include categories such as the explanation of an **event's cause or history** (e.g., a thorough description of how the event occurred), a **change in perspective** (the provision of different perspectives, not only viewpoints), the level of justification, and analytical quality (e.g., analysis-centered reporting) (Humprecht 2016). In addition, the accountability function has often been linked to the watchdog role of news media. In content analyses, the watchdog role has been measured by coding whether a critical perspective on authorities and probing questions asked of the responsible actors are present in news content (Humprecht 2016).
4. *Deliberation:* Deliberation is a concept rooted in discursive and participatory theories of the news media (Habermas 2006; Wessler 2008). With the rise of participatory journalism and social media platforms, expectations of a democratization of public discourse have been articulated (Gerhards and Schafer 2010). Subsequently, many researchers have investigated the deliberative quality of digital platforms and comment sections (see chapter on Hate Speech/Incivility in this volume) of online news (Esau et al. 2017; Karlsson et al. 2015; Rowe 2015). Since deliberation is a complex concept, operationalizations differ tremendously. Rowe (2015), for example, used categories such as the expression of opinion, the direction of opinion, justification, sources, and narratives for the measurement of deliberation. Ziegele et al. (2018) measured the inclusiveness of discussions by coding individual commenters per article and the diversity of opinions. Further, those authors measured deliberative interactivity by counting the numbers of received civil and rational comments and shares per article. Finally, Benson et al. (2012) studied deliberation in print and online newspapers in France, Denmark, and the US and focused on the presence of interview transcripts, polls, online chats, and forums.

4 Research Desiderata

Research on news performance remains focused on print newspapers and their websites (Karlsson and Sjøvaag 2016). Therefore, empirical results are limited to a few major print brands, whereas actual offers—and usage—are much broader. This phenomenon can be partially explained by the routines and conventions of scholarship in the field of communication studies. The current literature is largely informed by the standards of research, routines, and practices established by print journalism, and thus, recent studies often apply 'existing lenses' to the study of news performance. Prior to the rise of online outlets and digital platforms, news was classified according to media types, such as print,

TV, or radio (Mitchelstein and Boczkowski 2009). However, this practice is not suitable for the digital media landscape. Online news combines text, audio, and video, and reporting might be shaped by a thematic focus instead of technological constraints. Thus, it appears necessary to take into account different types of online platforms when studying news content to provide a more diverse picture. Only a few studies, for example, analyze differences in the news performance of media brands on their websites and on social media, e.g. Facebook (Steiner et al. 2019; Welbers and Opgenhaffen 2019). Moreover, some central aspects of news performance, including source transparency, have received comparatively little attention in previous research. In the context of digital media, source transparency has been discussed with regard to journalists' fact-checking efforts (Graves 2013). However, only a few studies explicitly examine source transparency in the context of news performance (Lecheler and Kruikemeier 2016; Revers 2014).

In sum, the main research gaps discussed in the literature concern the absence of original approaches to the study of digital news, the need for studies that focus on content instead of technology, the need for longitudinal approaches, and an absence of large-scale comparative studies. Moreover, an evaluation of online news content against a background of normative theories can assist in gaining a better understanding of the effects of digitalization and other global phenomena on journalistic routines and news content.

Relevant Variables in DOCA—Database of Variables for Content Analysis

Actor diversity: https://doi.org/10.34778/2l
Change of perspectives: https://doi.org/10.34778/2j
Cause/antecedents/history: https://doi.org/10.34778/2i
Critical analysis and comment: https://doi.org/10.34778/2k

References

Aalberg, T., Papathanassopoulos, S., Soroka, S., Curran, J., Hayashi, K., Iyengar, S., … Tiffen, R. (2013). International TV news, foreign affairs interest and public knowledge. *Journalism Studies*, *14*(3), 387–406.

Albæk, E., Skovsgaard, M., & de Vreese, C. H. (2017). Journalism and explaining news content. In *Oxford Research Encyclopedia of Communication*. Oxford University Press.

Baden, C., & Springer, N. (2014). Com(ple)menting the news on the financial crisis: The contribution of news users' commentary to the diversity of viewpoints in the public debate. *European Journal of Communication*.

Baden, C., & Springer, N. (2015). Conceptualizing viewpoint diversity in news discourse. *Journalism*, 1–19.

Benson, R. (2011). Book Review: Normative Theories of the Media: Journalism in Democratic Societies. *Journalism*, *12*(7), 924–926.

Benson, R. (2013). *Shaping immigration news: A French-American comparison*. Cambridge, Massachusetts: Cambridge University Press.

Benson, R., Blach-Ørsten, M., Powers, M., Willig, I., & Zambrano, S. V. (2012). Media systems online and off: Comparing the form of news in the United States, Denmark, and France. *Journal of Communication*, *62*(1), 21–38.

Benson, R., & Hallin, D. C. (2007). How states, markets and globalization shape the news: The French and US National Press, 1965–97. *European Journal of Communication*, *22*(1), 27–48.

Benson, R., Neff, T., & Hessérus, M. (2018). Media ownership and public service news: How strong are institutional logics? *The International Journal of Press/Politics*, 194016121878274.

Benson, R., & Wood, T. (2015). Who says what or nothing at all? Speakers, frames, and frameless quotes in unauthorized immigration news in the United States, Norway, and France. *American Behavioral Scientist*, *59*(7), 802–821.

Boumans, J. W., & Trilling, D. (2016). Taking stock of the toolkit: An overview of relevant automated content analysis approaches and techniques for digital journalism scholars. *Digital Journalism*, *4*(1), 8–23.

Burggraaff, C., & Trilling, D. (2020). Through a different gate: An automated content analysis of how online news and print news differ. *Journalism*, *21*(1), 112–129.

Christians, C. G., Glasser, T. L., McQuail, D., Nordenstreng, K., & White, R. A. (2009). *Normative theories of the media: Journalism in democratic societies*. Chicago: University of Illinois Press.

Cushion, S. (2012). *The democratic value of news. Why public service media matter.* Basingstoke: Palgrave Macmillan.

de Vreese, C. H., & Boomgaarden, H. G. (2012). Comparing news on Europe: Elections and beyond. In F. Esser & T. Hanitzsch (Eds.), *Handbook of Comparative Communication Research* (pp. 327–340). New York: Routledge.

de Vreese, C. H., Esser, F., & Hopmann, D. N. (2016). *Comparing Political Journalism*. London and New York: Routledge.

de Vreese, C. H., Esser, F., & Hopmann, D. N. (2017). *Comparing Political Journalism*. London: Routledge.

Eisenegger, M., Kamber, E., & Imhof, K. (2010). Hauptbefunde. In fög – Forschungsbereich Öffentlichkeit und Gesellschaft (Ed.), *Jahrbuch 2010: Qualität der Medien Qualität der Medien* (pp. 21–31). Basel: Schwabe.

Engesser, S. (2012). *Die Qualität des Partizipativen Journalismus im Web: Bausteine für ein integratives theoretisches Konzept und eine explanative empirische Analyse*. Springer-Verlag.

Esau, K., Friess, D., & Eilders, C. (2017). Design Matters! An Empirical Analysis of Online Deliberation on Different News Platforms. *Policy and Internet*, *9*(3), 321–342.

Ferree, M., Gamson, W. A., Gerhards, J., & Rucht, D. (2002). *Shaping aborting discourse. democracy and the public sphere in Germany and the United States*. Cambridge: Cambridge University Press.

Gerhards, J., & Schafer, M. S. (2010). Is the internet a better public sphere? Comparing old and new media in the USA and Germany. *New Media & Society*, *12*(1), 143–160.

Graves, L. (2013). *Deciding what's true: Fact-checking journalism and the new ecology of news*. Columbia University.

Habermas, J. (2006). Political communication in media society: Does democracy still enjoy an epistemic dimension? The impact of normative theory on empirical research. *Communication Theory*, *16*(4), 411–426.

Ho, D. E., & Quinn, K. M. (2009). Viewpoint diversity and media consolidation: an empirical study. *Stanford Law Review*, *61*(4), 781–868.

Humprecht, E. (2016). *Shaping online news performance. Political news in six western democracies*. *Palgrave Macmillan*.

Humprecht, E., & Esser, F. (2018a). Diversity in online news: On the importance of ownership types and media system types. *Journalism Studies*, *19*(12), 1825–1847.

Humprecht, E., & Esser, F. (2018b). Mapping digital journalism: Comparing 48 news websites from six countries. *Journalism*, *19*(4), 500–518.

Humprecht, E., & Udris, L. (2019). Long-term trends in news content. *Oxford Research Encyclopedia of Communication*, 1–21.

Imhof, K. (2010). Die Qualität der Medien in der Demokratie. In fög – Forschungsbereich Öffentlichkeit und Gesellschaft (Ed.), *Jahrbuch 2010: Qualität der Medien Qualität der Medien* (pp. 11–20). Basel: Schwabe.

Karlsson, M., Bergström, A., Clerwall, C., & Fast, K. (2015). Participatory journalism - the (r) evolution that wasn't. Content and user behavior in Sweden 2007–2013. *Journal of Computer-Mediated Communication*, *20*(3), 295–311.

Karlsson, M., & Sjøvaag, H. (2016). Content analysis and online news: Epistemologies of analysing the ephemeral web. *Digital Journalism*, *4*(1), 177–192.

Lecheler, S., & Kruikemeier, S. (2016). Re-evaluating journalistic routines in a digital age: A review of research on the use of online sources. *New Media & Society*, *18*, 156–171.

Masini, A., van Aelst, P., Zerback, T., Reinemann, C., Mancini, P., Mazzoni, M., … Coen, S. (2018). Measuring and explaining the diversity of voices and viewpoints in the news: A comparative study on the determinants of content diversity of immigration news. *Journalism Studies*, *19*(15), 2324–2343.

McQuail, D. (1992). *Media performance: Mass communication and the public interest*. London: Sage Publications.

McQuail, D. (2010). *McQuail's mass communication theory* (6th ed.). London: Sage Publications.

Mitchelstein, E., & Boczkowski, P. (2009). Between tradition and change: A review of recent research on online news production. *Journalism*, *10*(5), 562–586.

Möller, J., Trilling, D., Helberger, N., & van Es, B. (2018). Do not blame it on the algorithm: an empirical assessment of multiple recommender systems and their impact on content diversity. *Information Communication and Society*, *21*(7), 959–977.

Napoli, P., & Gillis, N. (2008). *Media Ownership and the Diversity Index: Outlining a Social Science Research Agenda* (McGannon Center Working Paper Series No. 5). New York.

Neuberger, C. (2018). *Journalismus in der Netzwerköffentlichkeit: Zum Verhältnis zwischen Profession, Partizipation und Technik*. (C. Nuernbergk & C. Neuberger, Eds.), *Journalismus im Internet: Profession - Partizipation - Technisierung*. Wiesbaden: Springer VS.

Reinemann, C., Stanyer, J., Scherr, S., & Legnante, G. (2012). Hard and soft news: A review of concepts, operationalizations and key findings. *Journalism*, *13*(2), 221–239.

Revers, M. (2014). The twitterization of news making: Transparency and journalistic professionalism. *Journal of Communication*, *64*, 806–826.

Rowe, I. (2015). Deliberation 2.0: Comparing the deliberative quality of online news user comments across platforms. *Journal of Broadcasting & Electronic Media*, *59*(4), 539–555.

Schatz, H., & Schulz, W. (1992). Qualität von Fernsehprogrammen. Kriterien und Methoden zur Beurteilung von Programmqualität im dualen Fernsehsystem. *Media Perspektiven*, *11*(1992), 690–712.

Scherr, S., Bachl, M., & de Vreese, C. H. (2019). Searching for watchdogs: Investigating journalistic role performance using latent-class analysis. *Journalism Studies*, *20*(11), 1635–1652.

Sehl, A. (2013). *Partizipativer Journalismus in Tageszeitungen: Eine empirische Analyse zur publizistischen Vielfalt im Lokalen* (1st ed., Vol. 3). Baden-Baden: Nomos Verlagsgesellschaft mbH & Co. KG.

Steiner, M., Magin, M., & Stark, B. (2019). Uneasy Bedfellows: Comparing the diversity of German public service news on television and on Facebook. *Digital Journalism*, *7*(1), 100–123.

Strömbäck, J., & Esser, F. (2014). Making sense of the mediatization of politics. *Journalism Studies*, *15*(3), 37–41.

van Aelst, P., Strömbäck, J., Aalberg, T., Esser, F., de Vreese, C. H., Matthes, J., … Stanyer, J. (2017). Political communication in a high-choice media environment: a challenge for democracy? *Annals of the International Communication Association*, *41*(1), 3–27.
van der Meer, T. G. L. A. (2016). Public Frame Building: The Role of Source Usage in Times of Crisis. *Communication Research*.
van Hoof, A., Jacobi, C., Ruigrok, N., & van Atteveldt, W. (2014). Diverse politics, diverse news coverage? A longitudinal study of diversity in Dutch political news during two decades of election campaigns. *European Journal of Communication*, *29*(6), 668–686.
Vogler, D., Eisenegger, M., Schneider, J., Hauser, L., & Udris, L. (2019). Qualität von Schweizer Informationsmedien im Zeitverlauf.
Welbers, K., & Opgenhaffen, M. (2019). Presenting News on Social Media: Media logic in the communication style of newspapers on Facebook. *Digital Journalism*, *7*(1), 45–62.
Wessler, H. (2008). Investigating Deliberativeness Comparatively. *Political Communication*, *25*(1), 1–22.
Ziegele, M., Quiring, O., Esau, K., & Friess, D. (2018). Linking news value theory with online deliberation: How news factors and illustration factors in news articles affect the deliberative quality of user discussions in SNS' comment sections. *Communication Research*.

Prof. Dr. Edda Humprecht is a Associate Professor at the Norwegian University of Science and Technology (NTNU) and Senior Research and Teaching Associate at UZH. Her research focuses on cross-national studies of news journalism and political communication.



Content Analysis in the Research Field of Political Coverage

Mariken A. C. G. van der Velden und Felicia Loecherbach

1 Introduction

Political knowledge is widely viewed as a foundation for democracy (DelliCarpini and Keeter 1996). Scholars of political communication have long argued that how citizens gain political information can only be understood by studying the media. After all, most countries have a representational form of democracy, meaning that citizens hardly interact with politics and politicians themselves, but learn about politics and its politicians through the media. This phenomenon is also known as the mediatization of politics (for excellent overviews, see Stromback 2010; Esser and Stromback 2014). Thus, scholars of political communication have developed theories and empirical strategies to demonstrate how media coverage on politics affects political attitudes and behaviour.

The coverage of politics, and more specifically policies or political issues, in news media has been particularly and abundantly studied by scholars of *agenda setting*, an approach which will be the focus of this chapter (see for example, McCombs and Shaw 1972, 1993; Baumgartner and Jones 2009, 1991; Soroka 1999; Walgrave and Van Aelst 2016; Vliegenthart and Walgrave 2010; Walgrave and Van Aelst 2016; Baumgartner et al. 2006). Building on Walter Lippmann's (1922) argument of the media's ability to construct social realities in the public mind, agenda setting refers to the transfer of

M. A. C. G. van der Velden (✉) · F. Loecherbach
Department of Communication Science, Vrije Universiteit Amsterdam,
Amsterdam, Netherlands
E-Mail: m.a.c.g.vander.velden@vu.nl

F. Loecherbach
E-Mail: f.loecherbach@vu.nl

F. Oehmer-Pedrazzi et al. (Hrsg.), *Standardisierte Inhaltsanalyse in der Kommunikationswissenschaft – Standardized Content Analysis in Communication Research*, https://doi.org/10.1007/978-3-658-36179-2_8

often covered topics in news media to its salience in the public agenda. McCombs and Shaw (1972) pioneered this field by surveying voters in North Carolina (USA) on the most important political issues and comparing these results to a manual media content analysis of nine local news media outlets. This has been coined the first-level agenda setting theory. Ever since the seminal study of McCombs and Shaw (1972), this finding has been replicated hundreds of times all across the world—ranging from other locations in the USA, to Europe, Asia, Latin America and Australia—for both election and non-election settings over a broad range of public issues and other aspects of political communication. Moreover, the agenda-setting theory has been extended from objects of attention to attributes, known as the second-level (McCombs 1992; McCombs and Shaw 1993; McCombs et al. 2014). From the second-level, it became apparent that "the media not only can be successful in telling us *what* to think about, they also can be successful in telling us *how* to think about it" (McCombs 2005, p. 546, emphasis in original). To find evidence for the second level of agenda setting, scholars of communication science used various forms of manual and automated forms of content analysis to uncover frames in media coverage (for an overview, see e.g. McCombs et al. 2014). In the early 2010's, the theory was extended with a third-level (Guo et al. 2012; Guo and McCombs 2011). This third level of the theory poses that news media bundle political issues and/or their attributes, and subsequently make the entire bundle of elements salient in the public's mind. This implies a network-like structure: When news media mention e.g. a political issue and a positive attribute thereof together, the audience will perceive these two elements as interconnected. The emergence of the third level went hand in hand with the upsurge in computer-assisted content analysis. In this section, we will describe the state-of-the-art of agenda-setting theory for the coverage of politics, and especially policies and political issues in media in three trends. Thereafter, we discuss the most common used research designs (pp. 5–8), and we conclude with the limitations and possible future directions of the field (pp. 8–10).

2 Trends in the Field

As briefly mentioned above, over the 50 years of the existence of agenda setting theory, the original study of McCombs and Shaw (1972) has been replicated and extended many times. The extensions and replications of the original Chapel Hill study have been mainly performed using manual content analysis. In this paragraph, the newest trends of these extensions are discussed. Nownes (2019) demonstrated that political issues are even more salient in the public minds when celebrities 'spotlight' the political issues. Additionally, following the discussion on whether there is 'news in soft news' (Prior 2003; Baum 2003; Reinemann et al. 2011), Boukes (2018) demonstrates that satire—a form of soft news—also carry out an agenda setting function. Agenda setting has also shown to impact the public's emotional state. Reporting crime news fuels fear among the public (Graziano and Percoco 2016; Burscher et al. 2015), whereas partisan reports

on economic news drives polarization (Anson 2016), and reporting on violations of the campaign finance laws, as well as other political scandals drives anger (Gaskins et al. 2018). Besides, Liu et al. (2016) demonstrate for the environmental issue, that the media's reporting on issues influences the policy solutions that are brought up. Another 'new' issue that extends the coverage of politics using agenda setting theory is looking at news coverage of demonstrations (for example, see Hutter and Vliegenthart 2016). The dynamic nature of agenda setting power not only holds for demonstrations, but also for post-referendum Brexit news coverage (Morrison 2019; McLaren et al. 2017), for political parties (Maier et al. 2017), and for consumer confidence (Vliegenthart and Damstra 2018). Next to these extensions, the theory has recently been replicated in third-wave and developing democracies. For example, Hughes and Mellado (2015) show that after the reintroduction of elections in Chile, the media performs as agenda setters. In addition, the theory has been shown to hold at local levels of politics too, such as the level of the German Federal elections (Bevan and Krewel 2015).

Another trend in this field is to extend the type of media data from traditional print media to the online environment. The rise of computational tools has allowed this type of research to blossom in the recent years. The studies discussed here rely upon both automatic and manual textual analyses. The findings of the agenda setting theory have been replicated for Google Trends data (Kalmoe 2017; Lee et al. 2015). Likewise, social media platforms have been studied. Combining Facebook data with web-tracking data (for an explanation of this design, see Common Research Designs and Results, pp. 5–8) in Spain, Cardenal et al. (2018) demonstrate that the use of Facebook as a news referral erodes the common public agenda, because it alters citizens' perceptions of the most important problems in the country. This study thereby implies that the traditional (print) media's agenda setting power has been limited by social media platfora, such as Facebook. Cardenal et al. (2018) alludes to the presence of populist leaders and populist messages being omnipresent at social media. The findings of Alonso-Muñoz and Casero-Ripollés (2018) underline this idea. The authors describe that European populist leaders use social media (i.e. Twitter) to increase or decrease saliency of political issues amongst their (potential) electorate. In contrast to Cardenal et al. (2018) and Alonso-Muñoz and Casero-Ripollés (2018), Feezell (2017) demonstrates experimental evidence that social media platforms as Facebook do have an agenda setting function, when participants are exposed to political information on Facebook. Moreover, the work by Kruikemeier et al. (2018) lays out that the traditional media and social media, looking at Twitter data, mutually influence each other when looking at political candidates. In a similar vein, the work by Banducci et al. (2018) also find considerable evidence of reciprocal media influence between television, newspapers and radio. A couple of years earlier, Conway et al. (2015) pioneered intra-media agenda setting using Twitter and traditional media, showing a symbiotic relationship between agendas in Twitter posts and traditional news. While traditional media follow candidates on certain topics, on other topics traditional political media coverage predicts the political agenda on Twitter. The study of Su and Borah (2019), however, brings in a new perspective on the traditional and online media

relationship by illustrating that Twitter's agenda is similar to the public opinion: Both follow the (print) media agenda. Banducci et al. (2018) results, nonetheless, indicate that inter-media agenda setting on leaders is complex and contingent, and seems to turn in part on the familiarity of the party leaders and the extent to which media coverage of them has established tropes prior to the campaign.

A third trend that can be observed in this field is to investigate how to get on the media agenda, given their immense agenda setting power. In this trend too, computational methods have found their way into the studies and allowed for both older questions to be tested using new methods as well as new questions to be answered. Carrying out an automatic content analysis of political parties' press releases and media reports in Austria using plagiarism software, Meyer et al. (2017) demonstrate that systemic media and party system agendas affect which issues make the news, while individual parties' issue strategies have limited autonomous impact. For the agenda setting theory, their finding implies that addressing issues that are important to the media and other parties help rank-and-file politicians and opposition parties, which lack the newsworthiness of their competitors in government. While Meyer et al. (2017) did not find any evidence that the media's selection of messages is driven by a party's issue profile or voters' issue concerns, Zoizner et al. (2017) found that the portrayal of the politicians does matter: Those who view themselves as a conduit of the public (delegates) are more responsive to the media than those acting on their own judgment (trustees). Also, in contrast to Meyer et al. (2017), Maier et al. (2017)—using a different analysis technique—show that Austrian parties were able to steer the media agenda on EU related issues. The same dynamic has been unfold by Jansen et al. (2018) and van der Pas et al. (2017). Looking at other organizations than political parties, Grömping (2019) demonstrates that first of all, the media institutions determine the room to manoeuvre, which is similar to the findings of Meyer et al. (2017), and second, Grömping (2019) shows that for human rights organizations individual strategies matter for their media attention, and thereby agenda setting power—i.e. in contrast to Meyer et al. (2017). This mixed bag of findings could be explained by the findings of Walgrave et al. (2017). The authors find evidence that the influence of media attention on political attention is non-linear: Agenda-setting operates differently when the media are in storm mode. That is, an explosive increase of media attention reinforces the effects of media coverage on the political agenda: When the news suddenly devotes a lot of attention to a topic, political actors go into overdrive too (e.g. increasing the number of hearings in the U.S. Congress about the topic at a much higher rate (Walgrave et al. 2017, p. 550)).

Another way to get on the media agenda has been extensively studied by scholars looking into news values (for a recent overview, see Harcup and O'neill 2017). This concept aims to capture the features of stories that are considered news, which is also called the attribute agenda in the agenda setting literature (for an overview, see e.g. McCombs et al. 2014). The seminal work on news values was written by Galtung and Ruge (1965). They pioneered the question how do events become news. To answer this question, they first embarked on a thought experiment where they imagined the world

to be an enormous set of broadcasting stations. If the emission of signals is continuous, there is a cacophony of sounds. To create a meaningful message out of this cacophony, "we have to select, and the question is what will strike our attention" (Galtung and Ruge 1965, p. 65). This metaphor of the world as a radio, where events are likened to sounds, elicited eight logical implications that are answers to the question of how events are turned into news stories. Additionally, the authors conducted a content analysis on the presentation of the Congo, Cuba and Cyprus crises in four Norwegian newspapers. This resulted in four additional news values. Hence, Galtung & Ruge defined twelve characteristics that are important to categorize stories into news or not. Over the last give and take 50 years, many more scholars have developed news value criteria. The other seminal list of criteria on news values was developed by Harcup and O'Neill (2001), investigating whether or not Galtung and Ruge's criteria are still up to date in 2001. Based on a scholarly literature review and a content analysis of three UK national daily newspapers, Harcup and O'Neill concluded that some of the 12 original news values where not exclusive, overlapping or shining light on an event solely from one angle. The vast majority of the studies, investigating which (combination of) news values are present in news on politics and specific policies, apply manual content analysis in which a list of news values is defined. Later work (e.g. Trilling et al. 2017; Al-Rawi 2019) however uses a range of computational methods—such as machine learning and topic modelling, elaborated on in the next section—to automatically, sometimes even without human input, derive these news values from the news coverage.

3 Common Research Designs and Results

There has been a wide variety of research designs when it comes to analyzing political content and policies. Most studies first start with the important task of identifying content as political: This either implies taking content that is inherently political due to the sources producing it or identifying part of content as political and other as non-political. The first approach resorts to documents drawn up by parties and politicians such as party manifestos and other policy documents (as discussed in Chapter by Castro, Gessler & Majo-Vazquez). Because these documents are considered political because of the actors that created the document, scholars typically use these documents to investigate how the content is conveyed. Questions such as which topics receive more attention and how are these topics framed are key to studying news coverage of policies and politics. The second approach is mostly related to news and social media content which is not inherently political but can exert an important influence on variables such as political knowledge, attitudes, and behaviour. Determining whether the content in this approach is political can be challenging (see next section). To establish media effects, the field increasingly moves to innovative ways of content analysis.

4 Political News Content

Apart from analyzing content directly produced by political actors, another challenge lies in identifying political content in other domains, such as news. Here, the first question is to (1) identify political content in news as opposed to other content and (2) how to do this in a (semi-)automated way.

The first point is related to mostly theoretical considerations about what constitutes political and can be part of creating manual codebooks as well as computer assisted forms of content analysis, such as key word searches, dictionaries, coding scripts and writing classifiers. One discussion that has been going on since Tuchman (1972) is a distinction between so-called “soft news” and “hard news” to distinguish politically relevant from less relevant content. In their literature review on the soft/hard news distinction (Reinemann et al. 2011) propose that for identifying “harder news” (which is usually associated with political information) three dimensions are needed: topic, focus, and style dimension (p. 232). This stresses that identifying political news content might not only be about the topic (is it political or entertainment content) but also a matter of framing and reporting style (similar to the idea of displayed in the second level of agenda setting). Hence, Heinemann et al. (2012) argue to incorporate both the first and second level of agenda setting when analyzing news content.

The second question regarding (semi-)automation especially becomes more of an issue in a time where content is constantly produced at scale. One example of using a mix of manual and automated content analysis in a supervised machine learning approach to identify different policy issues as well as frames in news content is Burscher et al. (2015), who annotated a large dataset manually to train a classifier on it that can be applied to other datasets and time contexts. Wiedemann (2018) proposed to use active learning for those approaches to reduce the amount of manual coding needed while not compromising the quality of results.

When having identified political content, the focus of research is often to identify parties and their positions in the news (e.g. Helbling and Tresch 2011). This strand of research is mostly aiming at questions related to visibility of actors and topics and is related to agenda setting research. Another focus is also put on identifying different perspectives or frames on issues (Borah 2011). Within this complex of questions, often normative considerations play a role, evaluating whether the news media are “balanced” or “biased” regarding certain actors, topics, or perspectives. This ties in with different understandings of diversity in news media (McQuail 1992; Bozdag and van den Hoven 2015; Möller et al. 2018).

5 Effects of Political (News) Content

One core question when studying political content in news media is to not only examine what is in the media (focus of content analytical methods) but also what influence it has on people. In order to do this, one very important question is finding out what content people were exposed to since only that can have a possible influence on variables such as attitudes, knowledge, or behavior.

The standard approach for judging the effect of (political, news) media content on political variables has been survey research—using self-reported media usage or media exposure as independent variable. The amount and type (newspaper, television, online) of media usage/exposure are crucial factors for studying media effects. This approach has been questioned early on as being only a mere proxy for the influence of the content and failing to account for individual-level differences (Price and Zaller 1993). Additionally, while being a feasible approach in a media environment with limited choices, the diversifying supply of content over the last decades decreased the usability of this methodological approach according to some scholars (for an overview, see Scharkow (2019).

From the 1990's onwards, survey data was complemented by so-called linkage analyses (see e.g. Kleinnijenhuis 1991; Roessler 1999 and chapter by Castro, Gessler & Majo-Vazquez in this volume for an overview). While the issue of over-reporting of news use/exposure is not solved by the linkage analysis approach, scholars have argued that over-reports are of a systematic nature, and therefore can be dealt with statistically (see de Vreese et al. 2017 for an overview). Nevertheless, in a recent meta-analysis, Scharkow (2019) stresses that the reliability of self-reports is rather problematic and Scharkow and Bachl (2019) provide a very fine-grained description of errors in linkage analyses. Especially in a fast-paced, ever-changing (online) media environment, getting reliable and valid media exposure data remains a challenge. An important methodological development, therefore, is the usage of online trace data (e.g. browsing histories, donated data take-outs from social media accounts) with a subsequent content analysis of the collected content (Dvir-Gvirsman et al. 2014) or the usage of ad-hoc mobile surveys (Ohme et al. 2016).

6 Limitations of the Method & Future Direction of the Field

The core concepts of agenda-setting theory are an object agenda, attribute agenda—or in other theoretical traditions called news values and frames—and the transfer of salience between pairs of agendas. Especially the latter core—the transfer of salience between the pairs of agenda—has received attention recently, when the focus on causality in, especially, the field of politics, gained momentum. Sevenans (2017b) notes that there is no consensus on the exact role these media play in the agenda-setting process. This in

turn leads to diverse causal interpretations of the media's role in the central theory of agenda setting. Sevenans (2017b) identifies three controversies that hamper the causal claim that media attention leads to the importance of political issues on the public agenda. She fleshes out the potential risk of spurious relationships, possible endogeinity problems, and the lack of an integrated theory explaining why the media influence agendas.

For the latter issue, Sevenans (2017a) takes stock and shows that a piece of information gets more attention from politicians when is conveyed via the media rather than an identical piece of information coming via a personal e-mail. This effect occurs largely across the board: it is not dependent on individual politician characteristics. Alluding to the same problem of lack of understanding of the media's role, Shpaizman (2018) notices that non-decisions are excluded in each study. Non-decisions refer to the pre-decisional process whereby some issues are systematically blocked by powerful actors from being placed on the formal agenda. Without looking at these, Shpaizman (2018) argues that scholars have been looking at a biased sample to test their theory.

The first two limitations hampering causal interpretation in the agenda setting theory—i.e. spurious relationships and/or possible endogeneity—as identified by Sevenans (2017b), could be the reason why some scholars have reported the media influences on mass opinion and behavior to be much weaker than commonly assumed (Greer 2019; Newton 2019). More specifically, Sciarini and Tresch (2018) show that the media's influence on the issue salience among the public mainly holds for domestic issues, not so much for Europeanised issues. This might be because people could either respond to the real-world events, about which the media also provides coverage, or entering the 'post-truth society', the (mainstream) media, might have lost (parts of) its legitimacy (Guess et al. 2020; Lischka 2017).

Issue salience, the central focus in the accumulated research on agenda setting to date, has been operationally defined in a variety of ways on both the media agenda and the public agenda (McCombs 2005). The development of new methods, as well as the availability of new types of data, have created an opportunity for scholars interested in the interaction between the media, politics, and the public. Techniques like digital-tracking data (Dvir-Gvirsman et al. 2014; Cardenal et al. 2018) or the usage of ad-hoc mobile surveys (Ohme et al. 2016) allow researchers to rely on other measures than self-reports. This is an important development, as Scharkow (2019) show that the reliability of self-reports is rather problematic in terms of reliability and accuracy of the measure. Such new insight that these new data could bring, could also lead to further develop a theory on the exact role these media play in the agenda-setting process, for which Sevenans (2017b) has made a start.

References

Al-Rawi, A. (2019). Viral news on social media. *Digital journalism,* 7(1), 63–79.

Alonso-Muñoz, L. and A. Casero-Ripollés (2018). Communication of European populist leaders on twitter: Agenda setting and the 'more is less' effect. *El profesional de la informaciòn* 27(6), 1193–1202. https://doi.org/10.3145/epi.2018.nov.03

Anson, I. G. (2016). Just the Facts? Partisan Media and the Political Conditioning of Economic Perceptions. *Political Research Quarterly*, 69(3), 444–456. doi: https://doi.org/10.1177/1065912916648016

Banducci, S., Cioroianu, I., Coan, T., Katz, G., & Stevens, D. (2018). Intermedia agenda setting in personalized campaigns: How news media influence the importance of leaders. *Electoral Studies*, 54, 281–288. doi: https://doi.org/10.1016/j.electstud.2018.04.011

Baum, M. A. (2003). Soft News and Political Knowledge: Evidence of Absence or Absence of Evidence? *Political Communication*, 20(2), 173–190. doi: https://doi.org/10.1080/10584600390211181

Baumgartner, F. R., Green-Pedersen, C., & Jones, B. D. (2006). Comparative studies of policy agendas. *Journal of European Public Policy*, 13(7), 959–974. doi: https://doi.org/10.1080/13501760600923805

Baumgartner, F. R., & Jones, B. D. (1991). Agenda Dynamics and Policy Subsystems. *The Journal of Politics*, 53(4), 1044–1074. doi: https://doi.org/10.2307/2131866

Baumgartner, F. R., & Jones, B. D. (2009). *Agendas and Instability in American Politics*, Second Edition. doi: https://doi.org/10.7208/chicago/9780226039534.001.0001

Benoit, K., & Laver, M. (2007). Estimating party policy positions: Comparing expert surveys and hand-coded content analysis. *Electoral Studies*, 26(1), 90–107. doi: https://doi.org/10.1016/j.electstud.2006.04.008

Bevan, S., & Krewel, M. (2015). Responsive elections: The effect of public opinion on political campaigns. *Electoral Studies*, 40, 548–555. doi: https://doi.org/10.1016/j.electstud.2015.07.006

Borah, P. (2011). Conceptual issues in framing theory: A systematic examination of a decade's literature. *Journal of Communication*, 61(2), 246–263. doi: https://doi.org/10.1111/j.1460-2466.2011.01539.x

Boukes, M. (2018). Agenda-Setting With Satire: How Political Satire Increased TTIP's Saliency on the Public, Media, and Political Agenda. *Political Communication*, 36(3), 426–451. doi: https://doi.org/10.1080/10584609.2018.1498816

Bozdag, E., & van den Hoven, J. (2015). Breaking the filter bubble: democracy and design. *Ethics and Information Technology*, 17(4), 249–265. doi: https://doi.org/10.1007/s10676-015-9380-y

Burscher, B., van Spanje, J., & de Vreese, C. H. (2015). Owning the issues of crime and immigration: The relation between immigration and crime news and anti-immigrant voting in 11 countries. *Electoral Studies*, 38, 59–69. doi: https://doi.org/10.1016/j.electstud.2015.03.001

Cardenal, A. S., Galais, C., & Majó-Vázquez, S. (2018). Is Facebook Eroding the Public Agenda? Evidence From Survey and Web-Tracking Data. *International Journal of Public Opinion Research*. doi: https://doi.org/10.1093/ijpor/edy025

Conway, B. A., Kenski, K., & Wang, D. (2015). The Rise of Twitter in the Political Campaign: Searching for Intermedia Agenda-Setting Effects in the Presidential Primary. *Journal of Computer-Mediated Communication*, 20(4), 363–380. doi: https://doi.org/10.1111/jcc4.12124

De Vreese, C. H., Boukes, M., Schuck, A., Vliegenthart, R., Bos, L., & Lelkes, Y. (2017). Linking survey and media content data: Opportunities, considerations, and pitfalls. *Communication Methods and Measures,* 11(4), 221–244.

Delli Carpini, M. X. and Keeter, S. (1996). *What Americans know about politics and why it matters.* New Haven/New York: Yale University Press.

Dvir-Gvirsman, S., Tsfati, Y., & Menchen-Trevino, E. (2014). The extent and nature of ideological selective exposure online: Combining survey responses with actual web log data from the 2013 Israeli Elections. *New Media & Society,* 18(5), 857–877. doi: https://doi.org/10.1177/1461444814549041

Esser, F., & Strömbäck, J. (Eds.). (2014). *Mediatization of politics: Understanding the transformation of Western democracies.* Springer.

Feezell, J. T. (2017). Agenda Setting through Social Media: The Importance of Incidental News Exposure and Social Filtering in the Digital Era. *Political Research Quarterly*, 71(2), 482–494. doi: https://doi.org/10.1177/1065912917744895

Galtung, J., & Ruge, M. H. (1965). The structure of foreign news: The presentation of the Congo, Cuba and Cyprus crises in four Norwegian newspapers. *Journal of peace research,* 2(1), 64–90.

Gaskins, B., Seljan, E., Lochner, T., Kowal, K., Dundon, Z., & Gold, M. (2018). From the FEC to the Ballot Box: Voter Accountability for Campaign Finance Law Violations. *American Politics Research*, 47(5), 1000–1035. doi: https://doi.org/10.1177/1532673x18759641

Graziano, P. R., & Percoco, M. (2016). Agenda setting and the political economy of fear: How crime news influences voters' beliefs. *International Political Science Review*, 38(5), 520–533. doi: https://doi.org/10.1177/0192512116656947

Greer, A. (2019). It's not the media, stupid. *POLITICAL QUARTERLY* 90(3), 553–558.

Grömping, M. (2019). More Bang for the Buck: Media Freedom and Organizational Strategies in the Agenda-Setting of Human Rights Groups. *Political Communication*, 36(3), 452–475. doi: https://doi.org/10.1080/10584609.2018.1551256

Guess, A. M., Nyhan, B., & Reifler, J. (2020). Exposure to untrustworthy websites in the 2016 US election. *Nature Human Behaviour*, 4(5), 472–480. doi: https://doi.org/10.1038/s41562-020-0833-x

Guo, L. and M. McCombs (2011). Network agenda setting: A third level of media effects. *Paper presented to the International Communication Association*, Boston 2011.

Guo, L., H. T. Vu, and M. McCombs (2012). An expanded perspective on agenda-setting effects: Exploring the third level of agenda setting. *Revista de comunicación*, (11), 51–68.

Harcup, T., & O'neill, D. (2001). What is news? Galtung and Ruge revisited. *Journalism studies,* 2(2), 261-280.

Harcup, T., & O'neill, D. (2017). What is news? News values revisited (again). *Journalism studies,* 18(12), 1470–1488.

Helbling, M., & Tresch, A. (2011). Measuring party positions and issue salience from media coverage: Discussing and cross-validating new indicators. *Electoral Studies,* 30(1), 174–183.

Hughes, S., & Mellado, C. (2015). Protest and Accountability without the Press. *The International Journal of Press/Politics*, 21(1), 48–67. doi: https://doi.org/10.1177/1940161215614565

Hutter, S., & Vliegenthart, R. (2016). Who responds to protest? Protest politics and party responsiveness in Western Europe. *Party Politics*, 24(4), 358–369. doi: https://doi.org/10.1177/1354068816657375

Jansen, A. S., Eugster, B., Maier, M., & Adam, S. (2018). Who Drives the Agenda: Media or Parties? A Seven-Country Comparison in the Run-Up to the 2014 European Parliament Elections. *The International Journal of Press/Politics,* 24(1), 7–26. doi: https://doi.org/10.1177/1940161218805143

Kalmoe, N. (2017). Digital news-seeking during wartime: Unobtrusive measures of Pakistani and American attention to drone strikes. *Journal of Information Technology & Politics*, 14(1), 16–33. doi: https://doi.org/10.1080/19331681.2016.1261265.

Kleinnijenhuis, J. (1991). Newspaper Complexity and the Knowledge Gap. *European Journal of Communication*, 6(4), 499–522. doi: https://doi.org/10.1177/0267323191006004006

Kruikemeier, S., K. Gattermann, and R. Vliegenthart (2018). Understanding the dynamics of politicians' visibility in traditional and social media. *The Information Society,* 34(4), 215–228. doi: https://doi.org/10.1080/01972243.2018.1463334

Lee, B., Kim, J., & Scheufele, D. A. (2015). Agenda Setting in the Internet Age: The Reciprocity between Online Searches and Issue Salience. *International Journal of Public Opinion Research*, 28(3), 440–455. doi: https://doi.org/10.1093/ijpor/edv026

Lippmann, W. (1922). *Public opinion*. doi: https://doi.org/10.1037/14847-000

Lischka, J. A. (2017). A Badge of Honor? *Journalism Studies*, 20(2), 287–304. doi: https://doi.org/10.1080/1461670x.2017.1375385

Liu, X., Robinson, S., & Vedlitz, A. (2016). Public Problem Characterization, Policy Solution Generation, and Intra-Agenda Connectivity. *Policy Studies Journal*, 44(4), 396–423. doi: https://doi.org/10.1111/psj.12163

Maier, M., Bacherle, P., Adam, S., & Leidecker-Sandmann, M. (2017). The interplay between parties and media in putting EU issues on the agenda: A temporal pattern analysis of the 2014 European Parliamentary election campaigns in Austria, Germany and the United Kingdom. *Party Politics*, 25(2), 167–178. doi: https://doi.org/10.1177/1354068817700532

McCombs, M. (2005). A Look at Agenda-setting: past, present and future. *Journalism Studies*, 6(4), 543–557. doi: https://doi.org/10.1080/14616700500250438

McCombs, M. E. (1992). Explorers and Surveyors: Expanding Strategies for Agenda-Setting Research. *Journalism Quarterly*, 69(4), 813–824. doi: https://doi.org/10.1177/107769909206900402

McCombs, M. E., & Shaw, D. L. (1972). The Agenda-Setting Function of Mass Media. *Public Opinion Quarterly*, 36(2), 176. doi: https://doi.org/10.1086/267990

McCombs, M. E., & Shaw, D. L. (1993). The Evolution of Agenda-Setting Research: Twenty-Five Years in the Marketplace of Ideas. *Journal of Communication*, 43(2), 58–67. doi: https://doi.org/10.1111/j.1460-2466.1993.tb01262.x

McCombs, M. E., Shaw, D. L., & Weaver, D. H. (2014). New Directions in Agenda-Setting Theory and Research. *Mass Communication and Society*, 17(6), 781–802. doi: https://doi.org/10.1080/15205436.2014.964871

McLaren, L., Boomgaarden, H., & Vliegenthart, R. (2017). News Coverage and Public Concern About Immigration in Britain. *International Journal of Public Opinion Research*, edw033. doi: https://doi.org/10.1093/ijpor/edw033

McQuail, D. (1992). *Media performance: Mass communication and the public interest*. London: Sage.

Meyer, T. M., Haselmayer, M., & Wagner, M. (2017). Who Gets into the Papers? Party Campaign Messages and the Media. *British Journal of Political Science*, 50(1), 281–302. doi: https://doi.org/10.1017/s0007123417000400

Möller, J., Trilling, D., Helberger, N., & van Es, B. (2018). Do not blame it on the algorithm: an empirical assessment of multiple recommender systems and their impact on content diversity. *Information, Communication & Society*, 21(7), 959–977. doi: https://doi.org/10.1080/1369118x.2018.1444076

Morrison, J. (2019). Re-framing free movement in the countdown to Brexit? Shifting UK press portrayals of EU migrants in the wake of the referendum. *The British Journal of Politics and International Relations*, 21(3), 594–611. doi: https://doi.org/10.1177/1369148119851385

Newton, K. (2019). It's Not the Media, Stupid. The Political Quarterly, 90(3), 543–552. doi: https://doi.org/10.1111/1467-923x.12732

Nownes, A. J. (2019). Can Celebrities Set the Agenda? *Political Research Quarterly*, 106591291986953. doi: https://doi.org/10.1177/1065912919869530

Ohme, J., Albaek, E., & H. de Vreese, C. (2016). Exposure Research Going Mobile: A Smartphone-Based Measurement of Media Exposure to Political Information in a Convergent Media Environment. *Communication Methods and Measures*, 10(2–3), 135–148. doi: https://doi.org/10.1080/19312458.2016.1150972

Price, V., & Zaller, J. (1993). Who Gets the News? Alternative Measures of News Reception and Their Implications for Research. *Public Opinion Quarterly*, 57(2), 133. doi: https://doi.org/10.1086/269363

Prior, M. (2003). Any Good News in Soft News? The Impact of Soft News Preference on Political Knowledge. *Political Communication*, 20(2), 149–171. doi: https://doi.org/10.1080/10584600390211172

Reinemann, C., Stanyer, J., Scherr, S., & Legnante, G. (2011). Hard and soft news: A review of concepts, operationalizations and key findings. *Journalism: Theory, Practice & Criticism*, 13(2), 221–239. doi: https://doi.org/10.1177/1464884911427803

Roessler, P. (1999). The Individual Agenda-Designing Process. *Communication Research*, 26(6), 666–700. doi: https://doi.org/10.1177/009365099026006002

Scharkow, M. (2019). The Reliability and Temporal Stability of Self-reported Media Exposure: A Meta-analysis. *Communication Methods and Measures*, 13(3), 198–211. doi: https://doi.org/10.1080/19312458.2019.1594742

Scharkow, M., & Bachl, M. (2019). How Measurement Error in Content Analysis and Self-Reported Media Use Leads to Minimal Media Effect Findings in Linkage Analyses: A Simulation Study (vol 34, pg 323, 2017). *Political Communicaton,* 36(2), 333-333.

Sciarini, P., & Tresch, A. (2018). The political agenda-setting power of the media: the Europeanization nexus. *Journal of European Public Policy*, 26(5), 734–751. doi: https://doi.org/10.1080/13501763.2018.1458890

SEVENANS, J. (2017a). How mass media attract political elites' attention. European Journal of *Political Research*, 57(1), 153–170. doi: https://doi.org/10.1111/1475-6765.12220

Sevenans, J. (2017b). One concept, many interpretations: the media's causal roles in political agenda-setting processes. *European Political Science Review*, 10(2), 245–265. doi: https://doi.org/10.1017/s1755773917000078

Shpaizman, I. (2018). Beyond the visible policy agenda: problem definitions disappearing from the agenda as nondecisions. *Journal of Public Policy*, 40(1), 72–95. doi: https://doi.org/10.1017/s0143814x18000260

Soroka, S. (1999). Policy Agenda-Setting Theory Revisited: A Critique of Howlett on Downs, Baumgartner and Jones, and Kingdon. *Canadian Journal of Political Science*, 32(4), 763–772. doi: https://doi.org/10.1017/s000842390001698x

Strömbäck, J. (2011). Mediatization and perceptions of the media's political influence. *Journalism studies,* 12(4), 423–439.

Su, Y., & Borah, P. (2019). Who is the agenda setter? Examining the intermedia agenda-setting effect between Twitter and newspapers. *Journal of Information Technology & Politics*, 16(3), 236–249. doi: https://doi.org/10.1080/19331681.2019.1641451

Trilling, D., Tolochko, P., & Burscher, B. (2017). From newsworthiness to shareworthiness: How to predict news sharing based on article characteristics. *Journalism & mass communication quarterly,* 94(1), 38–60.

Tuchman, G. (1972). Objectivity as strategic ritual: An examination of newsmen's notions of objectivity. *American Journal of Sociology,* 77(4), 660–679. doi: https://doi.org/10.1086/225193

Van der Pas, D. J., van der Brug, W., & Vliegenthart, R. (2017). Political Parallelism in Media and Political Agenda-Setting. *Political Communication*, 34(4), 491–510. doi: https://doi.org/10.1080/10584609.2016.1271374

Vliegenthart, R., & Damstra, A. (2018). Parliamentary Questions, Newspaper Coverage, and Consumer Confidence in Times of Crisis: A Cross-National Comparison. *Political Communication*, 36(1), 17–35. doi: https://doi.org/10.1080/10584609.2018.1478472

Vliegenthart, R., & Walgrave, S. (2010). When the media matter for politics: Partisan moderators of the mass media's agenda-setting influence on parliament in Belgium. *Party Politics*, 17(3), 321–342. doi: https://doi.org/10.1177/1354068810366016

Walgrave, S., Boydstun, A. E., Vliegenthart, R., & Hardy, A. (2017). The Nonlinear Effect of Information on Political Attention: Media Storms and U.S. Congressional Hearings. *Political Communication*, 34(4), 548–570. doi: https://doi.org/10.1080/10584609.2017.1289288

Walgrave, S., & Van Aelst, P. (2016). Political Agenda Setting and the Mass Media. *Oxford Research Encyclopedia of Politics.* doi: https://doi.org/10.1093/acrefore/9780190228637.013.46

Wiedemann, G. (2018). Proportional Classification Revisited: Automatic Content Analysis of Political Manifestos Using Active Learning. *Social Science Computer Review*, 37(2), 135–159. doi: https://doi.org/10.1177/0894439318758389

Zoizner, A., Sheafer, T., & Walgrave, S. (2017). How Politicians' Attitudes and Goals Moderate Political Agenda Setting by the Media. *The International Journal of Press/Politics*, 22(4), 431–449. doi: https://doi.org/10.1177/1940161217723149

Prof. Dr. Mariken A.C.G. van der Velden is Professor at the Vrije Universiteit Amsterdam. She obtained her PhD in Political Science at Vrije Universiteit Amsterdam. Her research interests revolve around democratic legitimacy, coalitional politics and computational methods.

Felicia Loecherbach is a PhD student at the Department of Communication at the Vrije Universiteit Amsterdam. Her research interests focus on the analysis of news diversity and the development of (open source) computational methods for communication research.



Content Analysis in the Research Field of Transnational Public Spheres

Dennis Lichtenstein

1 Introduction

The public sphere is a communication arena where speakers discuss political and societal issues, positions, and arguments in order to arrive at solutions for common problems (Habermas 2006; Wessler 2018). Normative functions of the public sphere in democracies, such as monitoring and control of politics, deliberation, and public opinion formation, have been extensively debated in the fields of communication and political theory, most frequently against the backdrop of the nation-state (Christians et al. 2009; Ferree et al. 2002). Trends of globalization and global governance, however, go along with transformations of the state, the increasing involvement of transnational institutions, and major changes in media systems. They raise questions about the need, reality, and consequences of transnational public spheres (Castells 2008; Nash 2014; Volkmer 2014).

Transnational public spheres extend national borders. They emerge through the entanglement and overlap of different national communication arenas (Risse 2010; Wessler et al. 2008). Transnational public spheres are examined in sociology, political science, and communications, in relation to economy and constitutional law, and from a historical perspective. In academic discussions, *transnational* public sphere is meant as global communication or, in a narrower sense, communication related to specific geopolitical regions, most prominently, the multi-level governance system of

D. Lichtenstein (✉)
Market and Audience Insights (MAI), Deutsche Welle, Bonn, Germany
E-Mail: dennis.lichtenstein@dw.com

F. Oehmer-Pedrazzi et al. (Hrsg.), *Standardisierte Inhaltsanalyse in der Kommunikationswissenschaft – Standardized Content Analysis in Communication Research,* https://doi.org/10.1007/978-3-658-36179-2_9

the European Union (EU). Discussions on the formation of a European Public Sphere (EPS) intensified in the early 1990s and 2000s (e.g., Eder and Kantner 2000; Eilders and Voltmer 2003; Gerhards 2000; Kielmansegg 1996), after the signing of the Maastricht Treaty (1992) had shifted substantial political power from individual nation-states to the EU. What exactly constitutes transnational public spheres is, however, still controversial. Some researchers emphasize the utopian ideal of a coherent and persistent transnational public sphere that stretches beyond nation-states and would require a shared identity and an integrated media system (Grimm 1995; Schlesinger 1993). In a more pragmatic way, others focus on the transnationalization of national public spheres. Accordingly, transnationalization refers either to convergent issue publics in which the same issues are discussed simultaneously with reference to the same frames (Eder and Kantner 2000) or to the discursive integration of communicative arenas that become intertwined by interactions of public speakers across countries (Adam 2007; Koopmans and Statham 2010; Wessler et al. 2008).

In communication science, different subfields cover different dimensions of transnational public spheres. Studies on the transnationalization of *media systems* examine international media markets, international broadcasting, and the global transmission and adaption of TV formats (Chalaby 2016; Gillespie et al. 2008; Kuipers 2011; Straubhaar 2007). Research on the *actors* in transnational public spheres examine the public relation activities of international institutions (Brüggemann 2008; Scherpereel et al. 2016), civil society and social movements (Bennett and Segerberg 2012; Bourne 2018), and journalists as the key actors in the processes of transnationalization (Dupuis 2012; Heft et al. 2019; Lorenz 2017; Offerhaus 2011). While only some researchers look at the *audience side* (Hepp et al. 2016; Lingenberg 2010; Walter 2017), the lion's share of research activities deals with the *content of media communication*. Among this strand of literature, studies on foreign news or international news geography explore the monitoring function of the public sphere (Cohen 2013; Golan 2010; Shoemaker and Cohen 2006; Strunz 2014). While studies in political communication have their main focus on policy legitimation and public deliberation (Koopmans and Statham 2010; Wessler et al. 2008), research on global journalism (Berglez 2008; van Leuven and Berglez 2016; Zhang and Hellmueller 2017) or global risk and crisis communication (Cottle 2009; Schwarz et al. 2016) examine how global or transnational issues, such as global warming or international terrorism, stimulate transnational media discourses.

In sum, content analyses on transnational public spheres examine (1) to what extent and under which circumstances national mass media make supranational governance visible and (2) how they enable transnational discourses. Further, some researchers investigate (3) the quality of transnational media debates (Polownikow 2017), and others study (4) how transnational public spheres relate to the construction of transnational collective identities (Eilders and Lichtenstein 2010; Lichtenstein 2014; Risse 2010).

2 Research Designs

The vast majority of content analyses on transnational public spheres have a comparative research design that establishes a relative benchmark for the evaluation of the degree or quality of transnationalization (e.g., Hepp et al. 2016; Tobler 2010; Wessler et al. 2008). Frequent levels of comparison are countries, media formats, and issues. A few studies compare media coverage of international and national issues (Gerhards 2000; Polownikow 2017).

With regards to sampling, research concentrates on the politically and economically strong Western states of Germany, France, and Great Britain at the expense of gaining knowledge about many smaller countries (with the important exception of the Netherlands). As for Central and Eastern European countries, comparative studies frequently focus on Poland. Especially in the early years of research on EPS, the primary research objects in content analyses were printed quality newspapers and magazines that are likely to cover EU and foreign issues and that are easily accessible. Since then, there has been an increasing number of studies dealing with online outlets and social media (Barisione and Michailidou 2017; Hänska and Bauchowitz 2019; Hepp et al. 2016; Schwarzenegger 2017), tabloids (Kleinen-von Königslöw 2012), regional newspapers (Lohner 2011; Vetters 2007), TV news (de Vreese 2005; Kevin 2003; Peter and de Vreese 2004), or political talk shows (Lichtenstein and Polownikow 2015). A minority of studies aims to compare different media formats (Hepp et al. 2016; Kevin 2003; Saurwein et al. 2006). Some triangulate content analysis with qualitative observations, interviews, or focus group discussions (Hepp et al. 2012; Shoemaker and Cohen 2006). Other combine content analysis with media effect studies based on survey data and experimental research designs (Brosius et al. 2019, 2020; de Vreese et al. 2008; Schuck and de Vreese 2006; Vliegenthart et al. 2008). Content analyses that analyze the media *as actors* in the formation of transnational public spheres examine opinion pieces in the media (Eilders and Voltmer 2003; Pfetsch et al. 2008; Wessler et al. 2008).

Even though transnationalization must be understood as a process, few studies include a time perspective in their research design (e.g., Eilders and Voltmer 2003; Gerhards 2000; Ivanova 2017; Koopmans and Statham 2010; Wessler et al. 2008). Instead, many studies examine discourses on conflict or crisis events such as Brexit (Bijsmans et al. 2018; Krzyżanowski 2019), the Euro crisis (Galpin 2017; Heft 2016; Nienstedt et al. 2015; Risse 2015) or other mostly *political* events. This is despite the fact that sports or pop cultural media events, such as the Eurovision Song Contest or the European Football Championship, also serve as catalysts for transnational communication. Methodologically, quantitative frame analysis (e.g., Grundmann et al. 2000; Statham and Trenz 2013; Tobler 2010; van de Steeg 2006) can be differentiated from qualitative discourse analyses (Galpin 2017; Krzyżanowski 2019; Triandafyllidou et al. 2009). This is also true for research on European identity in transnational public spheres (for more on quantitative work, see Baeva 2014; Lichtenstein 2014, 2016; for qualitative examples,

see Díez Medrano 2003; Lönnedonker 2018; Seidendorf 2007). Few studies on transnational public spheres conduct automatic coding (Brosius et al. 2019, 2020; Ivanova 2017).

3 Main Constructs

Meta-analyses and reviews of content analyses on transnational public spheres in general and on the EPS in particular (Adam 2015; de Vreese 2007; Machill et al. 2006; Pfetsch and Heft 2015) reveal that a plurality of constructs is examined. Research activities can be summarized along two dimensions (Koopmans and Erbe 2004): vertical and horizontal transnationalization. Whereas the former refers to the monitoring of supranational governance, the latter deals with cross-border communication. In research on both dimensions, frequent coding units are newspaper articles and anchored news. Studies on horizontal transnationalization, which are interested in discursive interactions, also code on the level of frame or claims in media pieces that can be attributed to a specific speaker. Despite an extensive body of research articles and differences in the methodological designs, existing studies on transnational public spheres can be summarized regarding several main constructs and results:

1. *Visibility of supranational governance:* Since the 1992 Maastricht Treaty, media in EU countries have shown a substantial increase of references to EU issues, **actors**, and **institutions**. References to the UN and other international institutions, in contrast, have been largely stable over time (Eilders and Voltmer 2003; Gerhards 2000; Hepp et al. 2016; Wessler et al. 2008). Trenz (2004) found that vertical transnationalization of public spheres goes along with a domestication of EU issues; this is because many media pieces do not place their main focus on EU issues, but instead make side references to the EU in discussions of national issues. In addition, the extent of vertical transnationalization differs strongly between countries, situational contexts, media, and policy fields. Countries with a long tradition as EU members, a high degree of political integration, and a rather EU-skeptical population rank particularly high (Pfetsch et al. 2008; Wessler et al. 2008). Key political events, elite conflicts, and EU summits lead to a cyclical visibility of EU governance (Boomgaarden et al. 2010; Lucht 2010; Statham and Trenz 2013). Regarding media differences, quality newspapers are most open for EU issues. In addition, the EU gains visibility in the coverage of European integration, economic, and monetary policies where it has far more decision-making authority compared to education and pension policies (Koopmans 2015; Koopmans et al. 2010; Polownikow 2017; Trenz 2004). Finally, the media focus on the output side of EU politics rather than on the early stages of policymaking (Wessler et al. 2008). As a consequence, EU executive politicians are far more visible compared to parliamentary and party actors or European civil society organizations (Koopmans 2007, 2015). In contrast to this,

Walter (2017) demonstrates that EU governance becomes visible in media content by frequent references to EU citizens.

2. *News geography and attention:* Studies on foreign news and the horizontal transnationalization of public spheres analyze the visibility of foreign countries and their representatives in the media (Cohen 2013; Golan 2010; Shoemaker and Cohen 2006; Strunz 2014; Wessler et al. 2008). They stress country characteristics (e.g., political and economic power), events-specific qualities (e.g., crisis or conflict), and geographic and cultural closeness between countries as important predictors for media attention (see also Fengler et al. 2018). Within the EU, Germany, France, Italy, and Great Britain accumulate media attention, even though the Euro crisis caused an increase of media attention toward crisis countries' economies (Post and Vollbracht 2013). Regarding other countries, EU membership does not enhance international visibility (Hepp et al. 2016; Kalantzi 2004; Wessler et al. 2008). Similar to the vertical dimension, horizontal transnationalization ranks higher in policy fields in which the EU has strong competencies (Koopmans et al. 2010; Polownikow 2017).
3. *Framing of transnational issues:* A series of studies compares the framing of European conflict events in different countries. For the "Haider case" and the debate about the integration of the right-wing party FPÖ in the Austrian government, van de Steeg (2006) found references to similar values across countries indicating a convergence of discourses. Other researchers analyzed conflicts *between* countries (Grundmann et al. 2000; Nienstedt et al. 2015; Tobler 2010). They found that national media outlets frame transnational conflicts through national lenses. The dominance of national perspectives in transnational communication is also revealed in studies on frames spread by international or public diplomacy broadcasters such as Al Jazeera, CNN, or RT (formerly Russia Today) on TV and YouTube channels (Haigh and Bruce 2017; Lichtenstein and Koerth 2020).
4. *Discursive interactions:* Claim analyses examine strategic speech acts by which a public speaker directs, for instance, a thematic demand or decision to another actor (Adam 2007; Koopmans and Statham 2010; Polownikow 2017). Since top-down interactions from the EU to the national level are scarce, national actors are the main contributors in discourses. Most claims directed to the EU stem from governmental politicians, while voices from parliament and civil society are less frequent. Similarly, cross-border interactions between countries are basically one-sided with domestic speakers as the main contributors (Adam 2007; Koopmans 2007). Although citizens' participation is stronger in online discussions on journalistic websites, weblogs, and Facebook, the content of claims still follows a national perspective (Michailidou and Trenz 2010) and users resist engaging in horizontal communication (Hepp et al. 2016). To some extent, this is different in the more elite centrist communication on Twitter. The analyzes of EU-related hashtags revealed cross-border interactions on Twitter by studying users' location information and their retweeting, quoting, replying, and addressing of users from other countries (Hänska and Bauchowitz 2019).

5. *Quality of transnationalization:* A minority of studies examines the quality of transnational public spheres (Engelmann 2009; Lohner 2011; Polownikow 2017). Quality is measured by analyzing 1) the plurality of issues or arguments and speakers, 2) the balance of issues and positions, 3) rationality regarding the share of justifications and evidence for positions, and 4) civility (Polownikow 2017). Whereas inclusiveness becomes manifest in media content more for arguments than for public speakers, the shares of justifications for positions, political balance, and civility differ between issues, countries, and media formats. Compared to coverage on national issues, Polownikow (2017) found a lower degree of rationality and more interpretation in transnational discourses.
6. **Identity:** The normative function of public spheres for community building and solidarity leads researchers to examine expressions and constructions of transnational identity in media discourses. Some studies examine expressions of identification with a transnational community as one dimension of transnational public spheres (Hepp et al. 2016; Tobler 2010; Tréfás 2010; Wessler et al. 2008). Identification is coded for different national and transnational communities by the indicators of explicit "we" references as well as collective names such as "the Europeans". Over time and compared to identification with the nation state, identification with the EU stagnates at a low level in EU countries' media. Transatlantic or Western "we"-references decrease. Internal EU conflicts, however, stimulate identification and go along with policy claims in the name of Europe (Tobler 2010; Tréfás 2010). Other researchers examine the framing of European integration (Díez Medrano and Gray 2010; Pfetsch et al. 2008) or the framing and evaluation of European identity in media content. Despite strong differences in the framing of the EU between countries and contexts, they found predominantly positive evaluations of the EU in all analyzed countries (Lichtenstein 2014, 2016). During the Euro crisis, however, European identity became more politicized, and identification turned into ambivalence (Lichtenstein and Eilders 2019).

4 Desiderata

Content analyses on transnational public spheres have provided data indicating that developments over time, structural restrictions, and contextual circumstances influence flows of communication. In sum, transnational public spheres are in flux, context sensitive, and multi-segmented. Even though transnational discourses emerge and are triggered by conflicts, countries and media formats are important fault lines that structure transnational communication.

Further research activities need, on the one hand, to update data on the EPS. Since comparative major projects on the EPS have been conducted in the 2000s, most acquired data are related to communication in the European Union before the recent major disruptions of the financial crisis, the Euro debt crisis, the migration crisis, and Brexit.

On the other hand, content analyses on transnational public spheres should go beyond EPS and strengthen research on transnational public spheres in the Arab region, Asia, or Africa and even compare between regions. Data collection should focus less extensively on printed newspapers and must consider online media in the first place. This can include EU-skeptical blogs as well as interactions on social network sites and the coverage of international issues on YouTube outlets. In addition, research should have a stronger focus on frames contributed by international broadcasters, such as RT, and their role for transnational discourses. Content analyses should also be triangulated with effect and reception studies to examine how transnational debates affect citizens' attitudes. Finally, further research should go beyond descriptive analyses and aim to explain processes of transnationalization. Regarding EPS, it should be examined why and under what conditions EU-skeptical voices contribute to a stimulating politicization of EU issues or to polarized discourses and renationalization.

Relevant Variables in DOCA—Database of Variables for Content Analysis

Institutional references: https://doi.org/10.34778/2zj
Speakers: https://doi.org/10.34778/2zk
EU identity frame: https://doi.org/10.34778/2zi

References

Adam, S. (2007). *Symbolische Netzwerke in Europa: Der Einfluss der nationalen Ebene auf europäische Öffentlichkeit. Deutschland und Frankreich im Vergleich.* Köln: Halem.

Adam, S. (2015). European public sphere. In G. Mazzoleni (ed.), *The international encyclopedia of political communication*. Wiley-Blackwell.

Baeva, G. (2014). *Nationale Identität als Medieninhalt. Theoretische Konzeption und empirische Messung am Beispiel Bulgariens*. Baden-Baden: Nomos.

Barisione, M. & Michailidou, A. (eds.) (2017). *Social media and european politics. Rethinking power and legitimacy in the digital era*. Basingstoke: Palgrave MacMillan.

Bennett, W. L. & Segerberg, A. (2012). The logic of connective action: Digital media and the personalization of contentious politics. *Information, Communication & Society, 15*(5), 739–768.

Berglez, P. (2008). What is Global Journalism? Theoretical and empirical conceptualisations. *Journalism Studies, 9*(6), 845–858.

Bijsmans, P., Galpin, C., & Leruth, B. (2018). 'Brexit' in transnational perspective: an analysis of newspapers in France, Germany and the Netherlands. *Comparative European Politics, 16*, 825–842.

Boomgaarden, H. G., Vliegenthart, R., de Vreese, C. H., & Schuck, A. R. T. (2010). News on the move: Exogenous events and news coverage of the European Union. *Journal of European Public Policy, 17*(4), 506–526.

Bourne, A. (ed.) (2018). *European social movements and the transnationalization of public spheres. Anti-austerity and pro-democracy mobilisation from the national to the global*. New York, NY: Routledge.

Brosius, A., van Elsas, E. J., & de Vreese, C. H. (2019). Trust in the European Union: Effects of the information environment. *European Journal of Communication, 34*(1), 57–73.

Brosius, A., van Elsas, E. J., & de Vreese, C. H. (2020). Bad news, declining trust? Effects of exposure to economic news on trust in the European Union. *International Journal of Public Opinion Research, 32*(2), 223–242.

Brüggemann, M. (2008). *Europäische Öffentlichkeit durch Öffentlichkeitsarbeit? Die Informationspolitik der Europäischen Kommission*. Wiesbaden: VS.

Castells, M. (2008). The new public sphere: Global civil society, communication networks, and global governance. *The ANNALS of the American Academy of Political and Social Science, 616*(1), 78–93.

Chalaby J. K. (2016). Television and globalization: The TV content global value chain. *Journal of Communication, 66*(1), 35–59.

Christians, C. G., Glasser, T. L., McQuail, D., Nordenstreng, K., & White, R. A. (2009). *Normative theories of the media: Journalism in democratic societies*. Urbana, IL: University of Illinois Press.

Cohen, A. A. (ed.) (2013). Fo*reign news on television. Where in the world is the global village?* New York: Peter Lang.

Cottle, S. (2009). *Global crisis reporting. Journalism in the global age*. New York, NY: Open University Press.

de Vreese, C. H. (2005). *Framing Europe. Television news and European integration*. Amsterdam: Het Spinhuis.

de Vreese, C. H. (2007). The EU as a public sphere. *Living reviews in European governance, 2*(3), 1–22.

de Vreese, C. H., Boomgaarden, H. G., & Semetko H. A. (2008). Hard and soft: Public support for Turkish membership in the EU. *European Union Politics, 9*(4), 511–530.

Díez Medrano, J. (2003). *Framing Europe. Attitudes to European integration in Germany, Spain, and the United Kingdom*. Princeton: Princeton University Press.

Díez Medrano, J. & Gray, E. (2010). Framing the European Union in national public spheres. In R. Koopmans & P. Statham (eds.), *The making of a European public sphere. Media discourse and political contention* (pp. 195–219). Cambridge: Cambridge University Press.

Dupuis, I. (2012). *Transnationalisierung der Öffentlichkeit in Mittelosteuropa: eine Befragung von Journalisten zur EU-Berichterstattung*. Baden-Baden: Nomos.

Eder, K. & Kantner, C. (2000). Transnationale Resonanzstrukturen in Europa: Eine Kritik der Rede vom Öffentlichkeitsdefizit. *Kölner Zeitschrift für Soziologie und Sozialpsychologie*, Sonderheft *40,* 306–331.

Eilders, C. & Lichtenstein, D. (2010). Diskursive Konstruktionen von Europa. Eine Integration von öffentlichkeits- und Identitätsforschung. *Medien & Kommunikationswissenschaft, 58*(2), 190–207.

Eilders, C. & Voltmer K. (2003). Zwischen Deutschland und Europa. Eine empirische Untersuchung zum Grad von Europäisierung und Europa-Unterstützung der meinungsführenden deutschen Tageszeitungen. *Medien & Kommunikationswissenschaft, 51*(2), 250–270.

Engelmann, I. (2009). Der mediale Diskurs über die EU-Osterweiterung. Europäisierung der deutschen Medienöffentlichkeit am Beispiel zweier Qualitätszeitungen. *Medien & Kommunikationswissenschaft, 57*(1), 39–55.

Fengler, S., Kreutler, M., Alku, M., Barlovac, B., Bastian, M., Bodrunova, S., … Zguri, R. (2018, online first). The Ukraine conflict and the European media: A comparative study of newspapers in 13 European countries. *Journalism*. doi: https://doi.org/10.1177/1464884918774311

Ferree, M. M., Gamson, W. A, Gerhards, J., & Rucht, D. (2002). Four models of the public sphere in modern democracies. *Theory and Society, 31*(3), 289–324.

Galpin, C. (2017). *The euro crisis and European identities: Political and media discourse in Germany, Ireland and Poland*. Basingstoke: Palgrave Macmillan.

Gerhards, J. (2000). Europäisierung von Ökonomie und Politik und die Trägheit der Entstehung einer europäischen Öffentlichkeit. *Kölner Zeitschrift für Soziologie und Sozialpsychologie*, Sonderheft *40*, 277–305.

Gillespie, M., Webb, A., & Baumann, G. (2008). Broadcasting britishness, strategic challenges and the ecology of overseas broadcasting by the BBC. *Historical Journal of Film, Radio and Television, 28*(4), 453–458.

Golan, G. J. (2010). Determinants of international news coverage. In G. J. Golan, T. J. Johnson, & W. Wanta (eds.), *International media communication in a global age* (pp. 125–144). New York, NY: Routledge.

Grimm, D. (1995). Does Europe need a constitution? *European Law Journal, 1*(3), 282–302.

Grundmann, R., Smith, D., & Wright, S. (2000). National elites and transnational discourses in the Balkan War. A comparison between the French, German and British establishment press. *European Journal of Communication, 15*(3), 299–320.

Habermas, J. (2006). Political communication in media society: Does democracy still enjoy an epistemic dimension? The impact of normative theory on empirical research. *Communication Theory, 16*(4), 411–426.

Haigh, M. M., Bruce, M. (2017). A comparison of the visual and story frames Al Jazeera English and CNN employed during the 2011 Egyptian revolution. *International Communication Gazette, 79*(4), 419–433.

Hänska, M. & Bauchowitz, S. (2019). Can social media facilitate a European public sphere? Transnational communication and the Europeanization of Twitter during the Eurozone crisis. *Social Media + Society, 5*(3), 1–14.

Heft, A. (2016). *Nationales Indexing versus Europäische Öffentlichkeit? Die Berichterstattung und Kommentierung deutscher und spanischer Zeitungen zur Griechenland- und Euro-Krise 2009/10*. Baden-Baden: Nomos.

Heft, A., Alfter, B., & Pfetsch, B. (2019). Transnational journalism networks as drivers of Europeanisation. *Journalism, 20*(9), 1183–1202.

Hepp, A., Brüggemann, M., Kleinen-von Königslöw, K., Lingenberg, S., & Möller, J. (2012). *Politische Diskurskulturen in Europa. Die Mehrfachsegmentierung europäischer Öffentlichkeit*. Wiesbaden: Springer VS.

Hepp, A., Elsler, M., Lingenberg, S., Mollen, A., Möller, J., & Offerhaus, A. (2016). The *communicative construction of Europe. Cultures of political discourse, public sphere and the euro crisis*. Basingstoke: Palgrave Macmillan.

Ivanova, A. (2017). *Transnationalisierung von Öffentlichkeiten. Eine länderübergreifende Langzeitanalyse der Klimaberichterstattung in Leitmedien*. Wiesbaden: Springer VS.

Kalantzi, M. (2004). Europa in der Tagespresse Deutschlands und Griechenlands. Ergebnisse einer empirischen Untersuchung. In L. M. Hagen (ed.), *Europäische Union und mediale Öffentlichkeit. Theoretische Perspektiven und empirische Befunde zur Rolle der Medien im europäischen Einigungsprozess* (pp. 178–194). Köln: Halem.

Kevin, D. (2003). *Europe in the media. A comparison of reporting, representation, and rhetoric in national media systems in Europe*. New York, NY: Routledge.

Kielmansegg, P. G. (1996). Integration und Demokratie. In M. Jachtenfuchs & B. Kohler-Koch (eds.), Europäische Integration (pp. 47–71). Opladen: Leske + Budrich.

Kleinen-von Königslöw, K. (2012). Europe in crisis? Testing the stability and explanatory factors of the Europeanization of national public spheres. *International Communication Gazette, 74*(5), 443–463.

Koopmans, R. (2007). Who inhabits the European public sphere? Winners and losers, supporters and opponents in Europeanised political debates. *European Journal of Political Research, 46*(2), 183–210.

Koopmans, R. (2015). How advanced is the Europeanization of public spheres? Comparing German and European structures of political communication. In Risse, T. (ed.), E*uropean public spheres. Politics is back* (pp. 53–83). Cambridge: Cambridge University Press.

Koopmans, R., & J. Erbe (2004). Towards a European public sphere? Vertical and horizontal dimensions of Europeanized political communication. *Innovation: The European Journal of Social Science Research, 17*(2), 92–118

Koopmans, R., Erbe, J., Meyer, M. F. (2010). The Europeanization of public sphere. Comparisons across issues, time, and countries. In R. Koopmans, & P. Statham (eds.), *The Making of a European Public Sphere. Media Discourse and Political Contention* (pp. 63–96). Cambridge: Cambridge University Press.

Koopmans, R. & Statham, P. (eds.) (2010). *The making of a european public sphere. Media discourse and political contention*. Cambridge: Cambridge University Press.

Krzyżanowski, M. (2019). Brexit and the imaginary of 'crisis': a discourse-conceptual analysis of European news media. *Critical Discourses Studies, 16*(4), 1–26.

Kuipers, G. (2011). Cultural globalization as the emergence of a transnational cultural field: Transnational television and national media landscapes in four European countries. *American Behavioral Scientist, 55*(5), 541–557.

Lichtenstein, D. (2014*). Europäische Identitäten. Eine vergleichende Untersuchung der Medienöffentlichkeiten ost- und westeuropäischer EU-Länder*. Konstanz: UVK.

Lichtenstein, D. (2016). Schweizer Konstruktionen europäischer Identität im Vergleich. Eine Analyse nationaler Mediendiskurse zu Erweiterungen und Vertiefungen der EU. *Studies in Communication Science, 16*(1), 8–18.

Lichtenstein, D. & Eilders, C. (2019). Lost in uncertainty. How the Euro crisis affected European identity constructions in national media discourses. *International Communication Gazette, 81*(6–8), 602–622.

Lichtenstein, D. & Koerth, K. (2020). Different shows, different stories: How German TV formats challenged the government's framing of the Ukraine crisis. *Media, War & Conflict*.

Lichtenstein, D. & Polownikow, A. (2015). Krisen-TV. Die Politisierung der Eurorettung in deutschen Talkshows. *Medien & Kommunikationswissenschaft, 63*(2), 208–228.

Lingenberg, S. (2010). *Europäische Publikumsöffentlichkeiten. Ein pragmatischer Ansatz*. Wiesbaden: VS.

Lohner, J. (2011). *Die Europäische Union in der Regionalpresse: Inhalte und journalistische Praxis aktueller Berichterstattung*. Münster: LIT.

Lönnendonker, J. (2018). *Konstruktion europäischer Identität. Eine Analyse der Berichterstattung über die Beitrittsverhandlungen mit der Türkei 1959 bis 2004*. Köln: Halem.

Lorenz, H. (2017). *Im Spannungsfeld von Wollen, Sollen und Können: Brüsseler Agenturjournalisten als Nachrichtendienstleister*. Baden-Baden: Nomos.

Lucht, J. (2010). European public sphere. Semantics of difference in European public communication. In D. Tréfás & J. Lucht (eds.), *Europe on trial. Shortcomings of the EU with regard to democracy, public sphere, and identity* (pp. 32–43). Innsbruck: Studienverlag.

Machill, M., Beiler, M., & Fischer, C. (2006). Europe-topics in Europe's media. The debate about the European public sphere: A meta-analysis of media content analyses. *European Journal of Communication, 21*(1), 57–88.

Michalidou, A. & Trenz, H.-J. (2010). Mediati(zi)ng EU politics: Online news coverage of the 2009 European Parliamentary elections. *Communications, 35*(3), 327–346.

Nash, K. (eds.) (2014). *Transnationalizing the public sphere*. Cambridge: Polity Press.

Nienstedt, H., Kepplinger, H. M., & Quiring, O. (2015). What went wrong and why? Roots, responsibilities, and solutions of the Euro crisis in European newspapers. In R. G. Picard (ed.), *The Euro Crisis in the Media. Journalistic Coverage of Economic Crisis and European Institutions* (pp. 19–44). London: I.B. Tauris.

Offerhaus, A. (2011). *Die Professionalisierung des deutschen EU-Journalismus. Expertisierung, Inszenierung und Institutionalisierung der europäischen Dimension im deutschen Journalismus*. Wiesbaden: VS.

Peter, J. & de Vreese, C. H. (2004). In search of Europe. A cross-national comparative study of the European Union in national television news. *The International Journal of Press/Politics, 9*(4), 3–24.

Pfetsch, B., Adam, S. & Eschner, B. (2008). The contribution of the press to Europeanization of public debates: A comparative study of issue salience and conflict lines of European integration. *Journalism, 9*(4), 465–492.

Pfetsch, B. & Heft, A. (2015). Theorizing communication flows within a European public sphere. In T. Risse (ed.), *European public spheres: Politics is back* (pp. 29–52). Cambridge: Cambridge University Press.

Polownikow, A. (2017). *Transnationale Öffentlichkeit und ihre Qualitäten: Eine quantitative Inhaltsanalyse deutscher Medienberichterstattung*. Wiesbaden: Springer VS.

Post, S., & Vollbracht, M. (2013). Processing crisis news. Media coverage on the economy in light of the euro-stability crisis. *Journal of Markets and Ethics, 2*, 116–130.

Risse, T. (2010). *A community of Europeans? Transnational identities and public spheres*. London: Cornell University Press.

Risse, T. (ed.) (2015). *European public spheres. Politics is back*. Cambridge: Cambridge University Press.

Saurwein, F., Brantner, C., & Dietrich, A. (2006). *Europäisierung der österreichischen Öffentlichkeit. Mediale Aufmerksamkeit für EU-Politik und der veröffentlichte Diskurs über die EU-Erweiterung*. Forschungsbericht. http://www.mediachange.ch/media/pdf/publications/2006_Europaeisierung-FINAL-Rep_.pdf.

Scherpereel, J., Wohlgemuth, J., & Schmelzinger, M. (2016). The adoption and use of Twitter as a re-presentational tool among members of the European Parliament. *European Politics and Society*, *18*(2), 111–127.

Schlesinger, P. (1993). Wishful thinking: Cultural politics, media, and collective identities in Europe. Journal of Communication, 43(2), 6–17.

Schuck, A. R. T. & de Vreese, C. H. (2006). Between risk and opportunity: News framing and its effects on public support for EU enlargement. *European Journal of Communication, 21*(1), 5–32.

Schwarz, A., Seeger, M. W., & Auer, C. (2016). Significance and structure of international risk and crisis communication research. Toward an integrative approach. In A. Schwarz, M. W. Seeger, & C. Auer (eds.), *The handbook of international crisis communication research* (pp. 1–10). Hoboken: Wiley.

Schwarzenegger, C. (2017). *Transnationale Lebenswelten: Europa als Kommunikationsraum*. Köln: Halem.

Seidendorf, S. (2007). *Europäisierung nationaler Identitätsdiskurse? Ein Vergleich französischer und deutscher Printmedien*. Baden-Baden: Nomos.

Shoemaker, P. J., & Cohen, A. A. (2006). *News around the world: Content, practitioners, and the public*. New York, NY: Routledge.

Statham, P. & Trenz, H.-J. (2013). *The politicization of Europe. Contesting the constitution in the mass medi*a. New York, NY: Routledge.

Straubhaar, J. (2007). *World television: From global to local*. Thousand Oaks, CA: Sage.

Strunz, B. (2014). *Globale Agenda. Die Nachrichtengeographie internationaler Nachrichtensender*. Nomos: Baden-Baden.

Tobler, S. (2010). *Transnationalisierung nationaler Öffentlichkeit. Konfliktinduzierte Kommunikationsverdichtungen und kollektive Identitätsbildung in Europa*. Wiesbaden: VS.

Tréfás, D. (2010). The Europeanization of National Identities. Results of a Content Analysis in six European Countries from 1956 to 2003. In D. Tréfás & J. Lucht (eds.), *Europe on Trial. Shortcomings of the EU with regard to democracy, public sphere, and identity* (pp. 106–124). Innsbruck: Studienverlag.

Trenz, H.-J. (2004). Media coverage on European governance. Exploring the European public sphere in national quality newspapers. *European Journal of Communication, 19*(3), 291–319.
Triandafyllidou, A., Wodak, R., & Krzyżanowski, M. (eds.) (2009). *The European public sphere and the media: Europe in crisis*. Basingstoke: Palgrave Macmillan.
van de Steeg, M. (2006). Does a public sphere exist in the European Union? An analysis of the content of the debate on the Haider case. *European Journal of Political Research, 45*(4), 609–634.
van Leuven, S., & Berglez, P. (2016). Global journalism between dream and reality: A comparative study of The Times, Le Monde and De Standard". *Journalism Studies, 17*(6), 667–683.
Vetters, R. (2007). Vor Ort in Europa. Ein Vergleich der EU-Berichterstattung deutscher Qualitäts- und Regionalzeitungen. *Medien & Kommunikationswissenschaft, 55*(3), 355–371.
Vliegenthart, R., Schuck, A. R. T., Boomgaarden, H. G., & de Vreese, C. H. (2008). News coverage and support for European integration, 1990–2006. *International Journal of Public Opinion Research, 20*(4), 415–439.
Volkmer, I. (2014). *The global public sphere. Public communication in the age of reflective interdependence*. Cambridge: Polity Press.
Walter, S. (2017). *EU citizens in the European public sphere: An Analysis of EU News in 27 EU Member States*. Wiesbaden: Springer VS.
Wessler, H. (2018). *Habermas and the nedia*. Cambridge: Polity Press.
Wessler, H., Peters, B., Brüggemann, M., Kleinen-von Königslöw, K., & Sifft, S. (2008). *Transnationalization of public spheres*. Basingstoke: Palgrave Macmillan.
Zhang, X. & Hellmueller, L. (2017). Visual framing of the European refugee crisis in Der Spiegel and CNN International: Global journalism in news photographs". *International Communication Gazette, 79*(5), 483–510.

Dr. Dennis Lichtenstein is a senior researcher at Market and Audience Insights (MAI) at Deutsche Welle and senior lecturer at Zeppelin University Friedrichshafen. His research interests include conflict and crisis communication in transnational and national media discourses and infotainment in political satire and YouTube formats.





Content Analysis in the Research Field of Election (Campaign) Coverage

Melanie Leidecker-Sandmann

1 Introduction

Media are by far the voters' most important source of information about elections and election campaigns (Reinemann 2013). Therefore, it does not come as a surprise that the analysis of election (campaign) coverage is a long-standing tradition in communication science (Katz and Warshel 2001). Central questions in the analysis of media reporting on elections and campaigns address, for example, the amount and structure of coverage relating to topics, key actors and their evaluations (e.g., Patterson 1993).

One possibility—among others—to differentiate the multiplicity of studies is to group them according to the following characteristics or framework conditions of the research design:

1) analyzed *level(s) of the political system* (at least three: supranational (e.g., European elections), national (e.g., parliamentary and presidential elections), and local or regional (e.g., state elections or even smaller, such as mayoral elections))
2) analyzed *country/countries*
3) analyzed *time period(s)*
4) analyzed *media source(s)* (e.g., newspaper, television, or online/social media coverage).

M. Leidecker-Sandmann (✉)
Department für Wissenschaftskommunikation, Karlsruher Institut für Technologie (KIT), Karlsruhe, Germany
E-Mail: leidecker-sandmann@kit.edu

F. Oehmer-Pedrazzi et al. (Hrsg.), *Standardisierte Inhaltsanalyse in der Kommunikationswissenschaft – Standardized Content Analysis in Communication Research*, https://doi.org/10.1007/978-3-658-36179-2_10

Other distinctions are, of course, imaginable, like content-related focus or analyzed communicator (e.g., media or party communication) and so on. The four proposed distinguishing characteristics can additionally be differentiated by the scale of the comparison:

1) *Single* versus *multiple elections* on *one* versus *multiple levels of the political system*
2) *Single* versus *multiple country/ies* studies
3) *Single case* versus *longitudinal* studies
4) O*ne type of media* versus comparisons of *multiple types of media*

2 Frequent Research Designs

1) With regard to election (campaign) coverage on different *levels of the political system*, the focus of the studies has long been (and still is) mainly on the national political level (e.g., Vowe and Dohle 2007; Sarcinelli 2011). However, several studies on the media coverage of European Parliament elections (so-called ‘second-order national elections’ (Reif and Schmitt 1980)) have been conducted on a regular basis (e.g., Blumler 1983; de Vreese et al. 2007; Maier et al. 2011; Tenscher 2011; Leidecker-Sandmann and Wilke 2020). In some cases, comparisons between the coverage of national and European elections have been made (e.g., Boomgarden et al. 2011; Leidecker-Sandmann and Wilke 2016; Strömbäck and Nord 2008; Wilke et al. 2011). What have largely been neglected by communication science studies are elections on the local or regional level, sometimes referred to as ‘third-order elections’ (Holtz-Bacha 1995; Tenscher 2013; Tenscher and Schmid 2009). Examples from the German context include Klein et al. (2002), Sarcinelli and Schatz (2002), Tenscher and Schmid (2009), or Wilke and Leidecker-Sandmann (2018). Even more rare are comparisons between the coverage of different types of election. This is especially true for studies that include election coverage on the local or regional level (exceptions include Cushion and Thomas 2016; Tenscher and Schmid 2009; or Wilke and Leidecker 2013).

2) According to the analyzed *country/ies*, studies on election (campaign) coverage are carried out all over the world (see, e.g., Strömbäck and Kaid 2008). However, U.S.-American studies dominate the research on election coverage, “supplying the field with theory, methodologies, and practices” (de Vries 2009, pp. 236–237). Examples for U.S.-American studies include Farnsworth and Lichter 2011; Klein and Maccobby 1954; McCombs and Shaw 1972; Patterson 1993; Singer 2009; Sotirovic and McLeod 2008, or Tedesco 2005, just to name a few—and the many studies on the 2020 presidential election that are still to be published (e.g., Cassese et al. 2022; Patterson 2020; Sintes-Olivella et al. 2022). The ‘Anglo-American bias’ (see also Strömbäck and Kaid 2008) has resulted in many studies of election (campaign) coverage that examine election (campaign) coverage from a U.S.-American perspective. Furthermore, international comparative studies often compare and interpret their findings against the American background (de Vries 2009).

In sum, single country studies (e.g., Harmer and Southern 2019; Klein and Maccobby 1954; McCombs and Shaw 1972; Patterson 1993; Sotirovic and McLeod 2008; Tedesco 2005; van Hoof et al. 2014; Wilke and Reinemann 2000) clearly dominate over (comparative) multiple countries studies[1]—although the number of cross-national studies has gradually increased. More recently, for example, an increasing number of comparative studies on election coverage in various European countries have been published (Blassnig et al. 2019; Magin et al. 2017; Umbricht and Esser 2016). One driver for this development is that election campaigns represent functional equivalents and are thus particularly suitable for cross-national comparative research. European elections are also very suitable for international comparisons, since the elections take place concurrently in most EU member states. When comparing different national (or local/regional) elections, they are not always held in close time proximity. Moreover, governmental and media systems may vary (e.g., majoritarian or proportional elections, [semi-]presidential or parliamentary system), which makes comparisons difficult, as do potentially different problem situations in different countries. While cross-national studies can also compare how the media cover one and the same election in different countries, only few studies have investigated this so far (e.g., Gardner et al. 2016; van Aelst et al. 2018; Vliegenthart et al. 2010). Other examples of international comparative studies include Adam et al. (2019); de Vreese et al. (2006); Peter and de Vreese (2004); Schuck and de Vreese (2011) (all with a focus on European elections); Holtz-Bacha et al. (2014); Kriesi (2012); Boomgarden et al. (2013) and Magin (2012) (both with an additional long-term perspective); Pfaffenberger (2016); Plasser et al. (2009); Salgado et al. (2019); Sülflow and Esser (2014); Schärdel and König (2017) and many more. Comparative research on election (campaign) coverage in Non-Western countries is still rare.

3) Regarding the analyzed *time period(s)*, most studies seem to focus on the pre-election coverage, the so-called 'hot phase' of the election campaign (usually a few weeks prior to the election) (Reinemann 2013; Schulz 2015). Analyses of the post-election coverage are less common. Furthermore, single case or single event studies dominate over longitudinal studies. Longitudinal studies are particularly interesting because they are especially suited to documenting whether and how media coverage of election (campaigns) has changed over time (Strömbäck and Kaid 2008, p. 1). Examples of such long-term analyses include Kleinnijenhuis (2003); Magin (2S012); Leidecker-Sandmann and Wilke (2019); Patterson (2000); Pfaffenberger (2016); Wilke and Reinemann (2000); Sigelman and Bullock (1991); van Hoof et al. (2014); Wied (2007); Zeh and Schulz (2019) or Takens et al. (2013).

4) Regarding the analyzed *media set*, analyses of traditional mass media coverage dominate. Early studies and most of the longitudinal studies tend to focus on the press

[1] Strömbäck and Kaid (2008, p. 1) speak of a "noticeable lack of comparative research on how the news media in different countries cover national elections."

coverage of elections and election campaigns (with a special emphasis on national rather than regional newspapers), as print media are among the earliest in campaign reporting. Even today, the election (campaign) coverage of the press is frequently analyzed, as the daily press still contributes to the political substance of the election campaign[2] (see e.g., Schulz 2001, 2011). In addition to newspapers, TV is often the subject of analysis, if only because of its greater reach compared to the press. The coding of TV news is somewhat more complex; long-term studies cannot go as far back as they can for the press (e.g., Cushion and Thomas 2016; Pfaffenberger 2016; Schäfer and Schmidt 2016; Takens et al. 2013; Zeh and Schulz 2019). The analyses of election campaign coverage in traditional news media have increasingly been supplemented by studies of online and social media coverage (e.g., Blassnig et al. 2019; Scharl and Weichselbraun 2008; Singer 2009; Harder et al. 2016; Harmer and Southern 2019; Magin et al. 2017; Papathanassopoulos and Giannouli 2019). One feature of these studies is that automated analysis methods are often used to collect and analyze digital content—at least to a certain degree. Some studies compare the coverage on one or several election campaigns in different media (e.g., de Vreese et al. 2006; Harder et al. 2016; Takens et al. 2013; Papathanassopoulos, and Giannouli 2019).

To sum up, single country studies that focus on one single election at one level of the political system and analyze one category of media are the most common. Few studies combine comparisons of elections on different levels of the political system and/or different media types and/or different countries and/or over a longer period of time.

Moreover, content analyses of election (campaign) coverage seem to stand alone more often rather than being combined with other methods of data collection. National election studies from Germany (GLES—German Longitudinal Election Study), Austria (AUTNES—Austrian National Election Study) and Switzerland (SELECTS—Swiss Election Study) are examples from German-speaking countries that combine survey and content analysis data; additionally, they gather longitudinal data and allow for comparisons across time. Combinations of quantitative and qualitative content analyses as well as input–output designs are rare.

[2] Communication research shows that the daily press is a medium that in many countries is still widely used for political information, while television predominantly supplies the recipients' need for entertainment (Schulz 2001). Furthermore, the amount of political coverage is more extensive in newspapers and provides readers with more background information than television coverage (Schulz 2011). Additionally, strong agenda-setting effects are attributed to newspapers (e.g., Walgrave et al. 2008).

3 Main Constructs

The objects of analysis are at least as diverse as the research designs. Only a few have been selected in the following on the basis of relevance (because they are often noticed in research).

Almost all studies examine the so-called ‘visibility’ of the elections within media coverage (in terms of the amount of coverage and/or placement)—this is particularly true for analyses of the coverage of European elections (keyword: ‘second-order national elections’). Most studies come to the conclusion that media coverage of elections on a national level is more visible and better placed than elections on a supranational level (such as European elections; e.g., de Vreese et al. 2007) or on a regional level (e.g., Tenscher and Schmid 2009; Leidecker-Sandmann and Wilke 2016). This is why de Vreese et al. (2006) and de Vreese et al. (2007) speak of “second-rate coverage of a second-order event” (de Vreese et al. 2007, p. 116) with regard to European elections. However, some studies show that European elections are increasingly visible in media coverage, especially on quality newspapers and public TV channels (e.g., Peter and de Vreese 2004; Schuck and de Vreese 2011; Wilke et al. 2011). The election (campaign) coverage on local or regional elections is hardly comparable to that on a national or supranational level because much of the coverage is to be found in the local and regional sections rather than the ‘main’ sections of the newspapers. The same holds true for local or regional TV and radio stations. If this is taken into account, however, reporting in Germany, for instance, is quite extensive—sometimes even more extensive than the European election coverage (e.g., Wilke and Leidecker 2013).

Another frequently analyzed construct is the so-called ‘Americanization’ thesis. “It is generally assumed that the term Americanization covers the leaking of the dominant American campaign techniques [and also the American 'style' of election coverage] into the western world” (de Vries 2009, p. 237).[3] The supposed Americanization of media coverage would express itself in reporting that focuses on top candidates and increasingly also on apolitical candidate characteristics (such as appearance or private life). These aspects are also referred to as the ‘**personalization**’ of campaign reporting. Furthermore, the competitive nature of the election would come to the fore. The media would report more often on which candidate is in front or falling behind (so-called ‘**horse-race coverage**’). Another element is ‘**negativity**’, a negative tone towards politics and/or political actors (e.g., Brettschneider 2013; Genz et al. 2001; Lengauer et al. 2011).

[3] For the sake of completeness, it should be mentioned that the Americanization thesis is controversially discussed. In the meantime, researchers tend to speak of ‘modernization’, which implies that the developments in different countries have the same causes (e.g., individualization of societies or commercialization of media systems) (Brettschneider 2013).

The aforementioned three characteristics of the so-called Americanization of election coverage[4]—personalization, horse-race coverage, and negativity—are discussed in more detail below. Due to the high number of studies with their different designs and operationalizations of the constructs, it is difficult to identify clear trends. Exceptions or studies that produce contrary findings can always be found. I sum up the most frequently drawn conclusions (see below). All three characteristics are—as the term 'Americanization' indicates—typically used in American election campaigns and the corresponding media coverage.

Personalization. The personalization hypothesis is very common in political as well as in communication science. In essence, it posits that, on the one hand, individual politicians (e.g. election campaign candidates) are becoming increasingly important in the context of political communication (e.g., Rahat and Sheafer 2007; Schulz 2011; van Aelst et al. 2012), whereas less emphasis is being placed on parties, political institutions and/or political issues and content. This form of personalization is also referred to as 'individualization'. On the other hand, the hypothesis claims that, in order to describe and evaluate individual politicians, apolitical characteristics, i.e., personality traits or even personal characteristics and private activities, are becoming increasingly relevant in political communication and election coverage. This aspect is also known as 'privatization' (e.g., Adam and Maier 2010; Kriesi 2012; van Aelst et al. 2012). The personalization thesis has been frequently empirically investigated (for an overview see, e.g., Adam and Maier 2010), in particular in studies that examine the individualization dimension of personalization in national campaign contexts. International comparisons (e.g., Gattermann 2015; Holtz-Bacha et al. 2014; Kriesi 2012) and long-term analyses (e.g., Leidecker-Sandmann and Wilke 2016; Rahat and Sheafer 2007; Zeh and Schulz 2015) are less common than cross-sectional analyses within a country (e.g., Adam and Maier 2010). In sum, "[t]he empirical evidence concerning the 'personalization of politics' thesis is, at best, mixed." (Kriesi 2012, p. 825; see also van Aelst et al. 2012; Schulz 2011) Uniform findings that point to a clear trend towards more personalization cannot be identified for any type of election. The inconsistency of the study results is due—among others—"to a lack of conceptual clarity and an absence of common operationalizations" (van Aelst et al. 2012, p. 203). Furthermore, there are major country-specific differences regarding the degree of personalization of election coverage (Kriesi 2012) as well as medium-specific differences (personalization seems to be more suitable for TV, for example, than for newspapers, e.g., Schulz 2011).

Horse-race coverage. So-called 'horse-race coverage' (often used synonymously with 'game frame' coverage[5]) describes the tendency of media—especially in election

[4] Other authors add further characteristics, e.g. reducing candidates' statements to sound bites (Patterson 1993).

[5] Although some scholars discuss whether these concepts can actually be used synonymously (e.g., Banducci and Hanretty 2014; de Vreese 2005; Valentino et al. 2001).

times—to focus on the question whether a political actor is winning or losing, such as polling results (e.g., Aalberg et al. 2012; Banducci and Hanretty 2014; Schmuck et al. 2017). Most scholars agree that horse-race coverage is one of the most prominent types of election coverage (e.g., Schmuck et al. 2017; Strömbäck and Kaid 2008) and that there has been an increase in horse-race coverage over time (e.g., Brettschneider 1997; O'Malley et al. 2014; Patterson 1993; Sigelman and Bullock 1991). However, the amount of horse-race coverage may differ between countries and media types (see, e.g., Banducci and Hanretty 2014; Strömbäck and Kaid 2008; Schmuck et al. 2017). For example, Strömbäck and Kaid (2008) argue that the amount or degree of horse-race coverage correlates with the 'commercial character' of the nation; commercial broadcasters seem to focus more on horse-race coverage than public broadcasters, tabloids more than quality newspapers[6] (e.g., Faßbinder 2009; Rafter et al. 2014; Strömbäck and van Aelst 2010). Moreover, the political or electoral system matters: "News media in majoritarian and presidential systems with single-member districts are those most likely to frame politics as a game." (Strömbäck and Kaid 2008, p. 7).

Negativity. "Investigations of 'negativity towards politics in the media' have become a core interest of communication and political science." (Lengauer et al. 2011, p. 180) The diversity of research approaches and operationalizations makes it hard to assess whether negativity is a generalizable trend in election (campaign) coverage outside of America (for an overview of operational manifestations see Lengauer et al. 2011). Several studies demonstrate, for example, that election coverage with a negative tone outweighs 'good news' and that negative references to political candidates predominate over positive evaluations (e.g., Lengauer 2007; Plasser et al. 2009; Wilke and Reinemann 2000). In their review, Lengauer et al. (2011, p. 189) therefore conclude that "with very few exceptions […] the existing body of evidence hints to predominant, increasing, and overarching negativity towards individual political protagonists and parties" (see e.g., Farnsworth and Lichter 2011; Patterson 1993, 2000; Kleinnijenhuis 2003; Sheafer et al. 2008). It is debatable whether the so-called 'exceptions' really are exceptions. Hopmann (2014), for example, states that negativity does not dominate the news coverage; further, a high proportion of election coverage seems to be 'neutral' in tone (e.g., Albaek et al. 2010; Kriesi 2012; Takens et al. 2013; Vliegenthart et al. 2011; de Vreese et al. 2006). Therefore, I conclude that previous results are mixed. The degree of negativity seems to vary between countries (e.g., Esser et al. 2017; Strömbäck and Kaid 2008), media systems and media types (see e.g., Esser et al. 2017), analyzed time periods (e.g., Sheafer et al. 2008; Leidecker-Sandmann and Wilke 2016), and the political actors under scrutiny (e.g., Leidecker-Sandmann and Wilke 2016).

[6] However, Schmuck et al. (2017) cannot confirm these findings for non-electoral periods.

4 Research Desiderata

To sum up the overall research desiderata according to the four proposed characteristics of the research design, 1) *local or regional elections* have seldom been made the subject of research. Further, there is a lack of 2) *cross-national studies* especially on Non-Western countries as well as 3) *longitudinal* studies or studies that compare the election coverage of 4) *several media types*. In general, there is a dearth of *comparative research* allowing for a generalization of results. The research field is missing a *uniform methodology* and *agreed-upon operationalizations* of the analyzed constructs. It is, therefore, difficult to compare the findings of the multiple case studies in the field (see e.g., Strömbäck and Kaid 2008; Walgrave and van Aelst 2006). This handbook and the corresponding database make an important contribution to addressing the problem of insufficient matched operationalization. In the future, more *meta-analyses* on election campaign coverage and on the analyzed constructs would be desirable. More research lies ahead that employs and applies *automated methods* of data collection and *mixed-method designs*, which to date are scarcely used.

Relevant Variables in DOCA—Database of Variables for Content Analysis

Personalization: https://doi.org/10.34778/2g
Horse-race coverage: https://doi.org/10.34778/2e
Negativity: https://doi.org/10.34778/2f

References

Aalberg, T., Strömbäck, J., & de Vreese, C.H. (2012). The framing of politics as strategy and game: A review of concepts, operationalizations and key findings. *Journalism, 13*(2), 162–178.

Adam, S. & Maier, M. (2010). Personalization of politics: A critical review and agenda for research. *Communication Yearbook*, 34(1), 213–257.

Adam, S., Eugster, B., Antl-Wittenberg, E., Azrout, R., Möller, J., de Vreese, C.H., Maier, M., & Kritzinger, S. (2019). News media's position-taking regarding the European Union: The synchronization of mass media's reporting and commentating in the 2014 European Parliament elections. *Journal of European Public Policy, 26(1)*, 44–62.

Albaek, E., van Dalen, A., Jebril, N., & de Vreese, C.H. (2010). *Political journalism in comparative perspective*. New York: Cambridge University Press.

Banducci, S., & Hanretty, C. (2014). Comparative determinants of horse-race coverage. *European Political Science Review*, 6(4), 621–640.

Blassnig, S., Ernst, N., Büchel, F., Engesser, S., & Esser, F. (2019). Populism in online election coverage: Analyzing populist statements by politicians, journalists, and readers in three countries. *Journalism Studies*, 20(8), 1110–1129.

Blumler, J.G. (1983). *Communicating to voters: Television in the first European Parliamentary elections*. London: Sage.

Boomgaarden, H.G., Semetko, H.A., & de Vreese, C.H. (2011). Hast' es nicht gesehen? Haupt- und Nebenwahlkämpfe in deutschen Fernsehnachrichten. In J. Tenscher (Ed.), *Kampagnen nach Wahl: Vergleichende Analysen aus Anlass der Wahlen zum Deutschen Bundestag und zum Europäischen Parlament im Jahr 2009* (pp. 181–197). Wiesbaden: Verlag für Sozialwissenschaften.

Boomgarden, H., de Vreese, C.H., Schuck, A.R.T., Azrout, R., Elenbaas, M., van Spanje, J.H.P., & Vliegenthart, R. (2013). Across time and space: Explaining variation in news coverage of the European Union. *European Journal of Political Research*, 52, 608–629.

Brettschneider, F. (1997). The press and the polls in Germany, 1980–1994: Poll coverage as an essential part of election campaign reporting. *International Journal of Public Opinion Research*, 9(3), 248–265.

Brettschneider, F. (2013). Amerikanisierung. In G. Bentele, H.-B. Brosius, & O. Jarren (Eds.), *Lexikon Kommunikations- und Medienwissenschaft* (2., überarbeitete und erweiterte Auflage) (pp. 17–18). Wiesbaden: Springer VS.

Cushion, S., & Thomas, R. (2016). Reporting different second order elections: A comparative analysis of the 2009 and 2013 local and EU elections on public and commercial UK television news bulletins. *British Politics, 11*, 164–183.

de Vreese C.H. (2005). The spiral of cynicism reconsidered. *European Journal of Communication*, 20(3), 283–301.

de Vreese, C.H., Banducci, S.A., Semetko, H.A., & Boomgaarden, H.G. (2006). The news coverage of the 2004 European Parliamentary election campaign in 25 countries. *European Union Politics*, *7*(4), 477–504.

de Vreese, C.H., Lauf, E., & Peter, J. (2007). The media and European Parliament elections. Second-rate coverage of a second-order event? In W. van der Brug, & C. van der Eijk (Eds.), *European elections & domestic politics. Lessons from the past and scenarios for the future* (pp. 116–130). Notre Dame (IN): University of Notre Dame Press.

de Vries, P. (2009). Book reviews [Review of the book *The handbook of election news coverage around the world,* by J. Strömbäck, & L.L. Kaid]. *Communications*, 34(2), 235–238.

Esser, F., Engesser, S., Matthes, J., & Berganza, R. (2017). Negativity. In C.H. de Vreese, F. Esser, & D.N. Hopmann (Eds.), *Comparing political journalism* (pp. 71–91). Abingdon: Routledge.

Faßbinder, K. (2009). Endspurt. Mediales Horse-Racing im Wahlkampf. *Publizistik*, 54, 499–512.

Farnsworth, S.J., & Lichter, S.R. (2011). *The nightly news nightmare: Television's coverage of U.S. presidential elections, 1988–2008*. Lanham et al.: Rowman & Littlefield.

Gardner, L., Wilkinson, K.T., Merle, P.F., Cui, B., Luo, Y., Rahimi, M., Rybalko, S., & VanDyke, M. (2016). Press coverage of the 2012 U.S. Presidential election: A multinational, cross-language comparison. In C. Bieber, & K. Kamps (Eds.), *Die US-Präsidentschaftswahl 2012* (pp. 241–267). Wiesbaden: Springer VS.

Gattermann, K. (2015). Europäische Spitzenkandidaten und deren (Un-)Sichtbarkeit in der nationalen Zeitungsberichterstattung. In M. *Kaeding, & N. Switek* (Eds.), *Die Europawahl 2014* (pp. 211–231). Wiesbaden: Springer VS.

Genz A., Schönbach K., & Semetko H.A. (2001). „Amerikanisierung"? Politik in den Fernsehnachrichten während der Bundestagswahlkämpfe 1990–1998. In H.D. Klingemann, & M. Kaase (Eds.), *Wahlen und Wähler* (pp. 401–413). Wiesbaden: VS Verlag für Sozialwissenschaften.

Harder, R.A., Paulussen, S., & van Aelst, P. (2016). Making sense of Twitter buzz. *Digital Journalism*, 4(7), 933–943.

Harmer, E., & Southern, R. (2019). Alternative agendas or more of the same? Online news coverage of the 2017 UK Election. In D. Wring, R. Mortimore, & S. Atkinson (Eds.), *Political*

communication in Britain. Campaigning, media and polling in the 2017 General Election (pp. 99–116). Cham, Switzerland: Palgrave Macmillan.

Holtz-Bacha, C. (1995). Massenmedien und Wahlen. Zum Stand der deutschen Forschung – Befunde und Desiderate. In C. Holtz-Bacha, & L.L. Kaid (Eds.), *Wahlen und Wahlkampf in den Medien. Untersuchungen aus dem Wahljahr 1994* (pp. 9–44). Opladen: Westdeutscher Verlag.

Holtz-Bacha, C., Langer, A.I., & Merkle, S. (2014). The personalization of politics in comparative perspective: Campaign coverage in Germany and the United Kingdom. *European Journal of Communication*, 29(2), 153–170

Hopmann, D.N. (2014). Politicians, parties and political candidates in the news media. In C. Reinemann (Ed.), *Political Communication* (pp. 389–407). Berlin, & Boston: de Gruyter.

Katz, E., & Warshel, Y. (2001). *Election Studies: What's their use?* Boulder, Colo.: Westview Press.

Klein, M. W., & Maccoby, N. (1954). Newspaper objectivity in the 1952 campaign. *Journalism Quarterly*, 31(3), 285–296.

Klein, M., Ohr, D., & Heinrich, S. (2002). Spitzenkandidaten im Wahlkampf. Die Veränderbarkeit von Kandidatenimages durch Wahlkampf und Medien, untersucht am Beispiel der nordrhein-westfälischen Landtagswahl am 14. Mai 2000. *Publizistik*, 47, 412–435.

Kleinnijenhuis, J. (2003). Het publiek volgt media die de politiek volgen. In Raad voor Maatschappelijke Ontwikkeling (Ed.) *Medialogica. Over Het Krachtenveld Tussen Burgers, Media en Politiek* (pp. 151–211). Den Haag: SDU-Uitgevers.

Kriesi, H. (2012). Personalization of national election campaigns. *Party Politics*, *18*(6), 825–844.

Leidecker-Sandmann, M., & Wilke, J. (2016). Auf dem Weg zur Konvergenz? Bundestags- und Europawahlberichterstattung in der deutschen Presse im Vergleich (1979–2014). In J. Tenscher, & U. Rußmann (Eds.), *Vergleichende Wahlkampfforschung. Studien anlässlich der Wahlen in Deutschland* (pp. 131–153). Wiesbaden: Springer VS.

Leidecker-Sandmann, M., & Wilke, J. (2019). Die Presseberichterstattung zur Bundestagswahl 2017 im Langzeitvergleich. In C. Holtz-Bacha (Ed.), *Die (Massen-)Medien im Wahlkampf. Die Bundestagswahl 2017* (pp. 209–242). Wiesbaden: Springer VS.

Leidecker-Sandmann, M., & Wilke, J. (2020). Routine- oder „Schicksalswahl"? Die deutsche Presseberichterstattung über die Europawahl 2019 im Langzeitvergleich. In C. Holtz-Bacha (Ed.), *Europawahlkampf 2019 – Zur Rolle der Medien* (pp. 181–212). Wiesbaden: Springer VS.

Lengauer, G. (2007). *Postmoderne Nachrichtenlogik. Redaktionelle Politikvermittlung in medienzentrierten Demokratien*. Wiesbaden: VS Verlag.

Lengauer, G., Esser, F., & Berganza, R. (2011). Negativity in political news: A review of concepts, operationalizations and key findings. *Journalism*, 13(2), 179–202.

Magin, M. (2012). *Wahlkampf in Deutschland und Österreich. Ein Langzeitvergleich der Presseberichterstattung (1949–2006)*. Köln: Böhlau Verlag.

Magin, M., Podschuweit, N., Haßler, J., & Russmann, U. (2017). Campaigning in the fourth age of political communication. A multi-method study on the use of Facebook by German and Austrian parties in the 2013 national election campaigns. *Information, Communication and Society*, 20(11), 1698–1719.

Maier, M., Strömbäck, J., & Kaid, L.L. (Eds.). (2011). *Political communication in European Parliamentary elections*. Aldershot: Ashgate Publishing.

McCombs, M.E., & Shaw, D.L. (1972). The agenda-setting function of mass media. *Public Opinion Quarterly*, 36(2), 176–187.

O'Malley, E., Brandenburg, H., Flynn, R., McMenamin, I., & Rafter, K. (2014). The impact of the economic crisis on media framing: Evidence from three elections in Ireland. *European Political Science Review*, 6(3), 407–426.

Papathanassopoulos S., & Giannouli I. (2019). Media coverage of Greece's September 2015 election campaign: Framing and interpreting the issues at stake. In S. Salgado (Ed.), *Mediated campaigns and populism in Europe. Political campaigning and communication*. Cham: Palgrave Macmillan.

Patterson, T.E. (1993). *Out of order*. New York: Knopf.

Patterson, T.E. (2000). *Doing well and doing good: How soft news and critical journalism are shrinking the news audience and weakening democracy – and what news outlets can do about it*. Cambridge, MA: Harvard University.

Peter, J. &, de Vreese, C.H. (2004). In search of Europe: A cross-national comparative study of the European Union in national television news. *Harvard International Journal of Press/Politics,* 9(4), 3–24.

Pfaffenberger F. (2016). Die Berichterstattung zur Europawahl 2014 in den Hauptabendnachrichten – ein historischer und internationaler Vergleich. In C. Holtz-Bacha (Ed.), *Europawahlkampf 2014. Internationale Studien zur Rolle der Medien*. Wiesbaden: Springer VS.

Plasser, F., Pallaver, G., & Lengauer, G. (2009). Die (trans-)nationale Nachrichtenlogik in Mediendemokratien. Politischer TV-Journalismus im Wahlkampf zwischen transatlantischer Konvergenz und nationaler Divergenz. In F. Marcinkowski, & B. Pfetsch (Eds.), *Politik in der Mediendemokratie* (pp. 174–202). Wiesbaden: VS Verlag.

Rafter, K., Flynn, R., McMenamin, I., & O'Malley, E. (2014). Does commercial orientation matter for policy-game framing? A content analysis of television and radio news programmes on public and private stations. *European Journal of Communication*, 29(4), 433–448.

Rahat, G., & Sheafer, T. (2007). The personalization(s) of politics: Israel, 1949–2003. *Political Communication*, 24, 65–80.

Reif, K., & Schmitt, H. (1980). Nine second-order national elections. A conceptual framework for the analysis of European election results. *European Journal of Political Research* 8(1), 3–44.

Reinemann, C. (2013). Wahlkampfkommunikation. In G. Bentele, H.-B. Brosius, & O. Jarren (Eds.), *Lexikon Kommunikations- und Medienwissenschaft* (2., überarbeitete und erweiterte Auflage) (p. 367). Wiesbaden: Springer VS.

Sarcinelli, U. (2011). *Politische Kommunikation in Deutschland. Medien und Politikvermittlung im demokratischen System*. Wiesbaden: VS-Verlag.

Sarcinelli, U., & Schatz H. (Hrsg.). (2002). *Mediendemokratie im Medienland? Inszenierungen und Themensetzungsstrategien im Spannungsfeld von Menschen und Parteieliten am Beispiel der nordrhein-westfälischen Landtagswahl 2000*. Opladen: Leske + Budrich.

Salgado, S., Culloty, E., & Stępińska, A. (2019). Comparing election news coverage in Europe: Theoretical and empirical foundations of the approach. In S. Salgado (Ed.), *Mediated campaigns and populism in Europe. Political campaigning and communication* (pp. 1–22). Cham: Palgrave Macmillan.

Schäfer, A., & Schmidt, S. (2016). Dynamiken der Wahlkampfberichterstattung: Eine longitudinale Analyse der deutschen TV-Berichterstattung 2005 bis 2013. *Publizistik*, 61(2), 105–122.

Schärdel, J., König, P. (2017). Professors, comedians and billionaires: An empirical analysis of newspaper coverage of new Eurosceptic parties in three 2013 national elections. *Comparative European Politics*, 15, 310–335.

Scharl, A. & Weichselbraun, A. (2008). An automated approach to investigating the online media coverage of U.S. Presidential elections. *Journal of Information Technology & Politics*, 5(1), 121–132.

Schmuck, D., Heiss, R., Matthes, J., Engesser, S., & Esser, F. (2017). Antecedents of strategic game framing in political news coverage. *Journalism*, 18(8), 937–955.

Schuck, A., & de Vreese, C.H. (2011). Finding Europe: Mapping and explaining antecedents of 'Europeanness' in news about the 2009 European Parliamentary elections. *Studies in Communication | Media*, 2, 265–294.

Schulz, W. (2001). Politische Mobilisierung durch Mediennutzung? Beziehungen zwischen Kommunikationsverhalten, politischer Kompetenz und Partizipationsbereitschaft. In A. Koch, M. Wasmer &, P. Schmidt (Eds.), *Politische Partizipation in der Bundesrepublik Deutschland: empirische Befunde und theoretische Erklärungen* (pp. 177–180). Opladen: Leske + Budrich.

Schulz, W. (2011). *Politische Kommunikation. Theoretische Ansätze und Ergebnisse empirischer Forschung*. Wiesbaden: Springer VS.

Schulz, W. (2015). *Medien und Wahlen*. Wiesbaden: Springer VS.

Sheafer, T., Weimann, G., & Tsfati, Y. (2008). Campaigns in the Holy Land: The content and effects of election news coverage in Israel. In J. Strömbäck, & L.L. Kaid (Eds.), *The handbook of election news coverage around the world* (209–225). Abingdon: Routledge.

Sigelman, L., & Bullock, D. (1991). Candidates, issues, horse races, and hoopla: Presidential campaign coverage, 1888–1998, *American Politics Quarterly*, 19(1), 5–32.

Singer, J.B. (2009). Role call: 2008 campaign and election coverage on the web sites of leading U.S. newspapers. *Journalism & Mass Communication Quarterly*, *86*(4), 827–843.

Sotirovic, M., & McLeod, J. (2008). Media coverage of U.S. elections: Persistence of tradition. In: J. Strömbäck, & L.L. Kaid (Eds.). *The handbook of election news coverage around the world*. (pp. 21–40). Abingdon: Routledge.

Strömbäck, J., & van Aelst, P. (2010). Exploring some antecedents of the media's framing of election news: A comparison of Swedish and Belgian election news. *The International Journal of Press/Politics*, 15(1), 41–59.

Strömbäck, J., & Kaid, L.L. (Eds.). (2008). *The handbook of election news coverage around the world*. Abingdon: Routledge.

Strömbäck, J., & Nord, L. (2008). Still a second-order election. Comparing Swedish media coverage of the 2004 European Parliamentary election and the 2002 national election. In: L.L. Kaid (Ed.), *The EU Expansion. Communicating shared sovereignty in the parliamentary elections* (pp. 137–152). Berlin: Lang.

Sülflow, M., Esser, F. (2014). Visuelle Kandidatendarstellung in Wahlkampfbeiträgen deutscher und amerikanischer Fernsehsender – Image Bites, Rollenbilder und nonverbales Verhalten. *Publizistik,* 59, 285–306.

Takens, J., van Atteveldt, W., van Hoof, A., & Kleinnijenhuis, J. (2013). Media logic in election campaign coverage. *European Journal of Communication*, 28(3), 277–293.

Tedesco, J.C. (2005). Issue and strategy agenda setting in the 2004 Presidential election: exploring the candidate-journalist relationship. *Journalism Studies*, 6(2), 187–201.

Tenscher, J. (Ed.). (2011). *Superwahljahr 2009. Vergleichende Analysen aus Anlass der Wahlen zum Deutschen Bundestag und zum Europäischen Parlament.* Wiesbaden: VS Verlag für Sozialwissenschaften.

Tenscher, J. (2013). Politische Kommunikation im Kleinen – eine Einleitung. *Studies in Communication | Media*, 2(3), 265–273.

Tenscher, J., & Schmid, S. (2009). Berichterstattung nach Wahl. Eine vergleichende Analyse von Bundes- und Landtagswahlkämpfen in der Regionalpresse. *Medien & Kommunikationswissenschaft, 57*(1), 56–77.

Umbricht, A., & Esser, F. (2016). The push to popularize politics. Understanding the audience-friendly packaging of political news in six media systems since the 1960s. *Journalism Studies*, 17(1), 100–121.

Valentino, N.A., Beckmann, M.N., & Buhr, T.A. (2001). A spiral of cynicism for some: The contingent effects of campaign news frames on participation and confidence in government. *Political Communication*, 18(4), 347–367.

van Aelst, P., Sheafer, T., & Stanyer, J. (2012). The personalization of mediated political communication: A review of concepts, operationalizations and key findings. *Journalism*, 13(2), 203–220.

van Aelst, P., Vliegenthart, R., Boydstun, A.E. (2018). The whole world is watching: Comparing European and United States news coverage of the U.S. 2008 and 2016 elections. *International Journal of Communication, 12*, 4731–4753.

van Hoof, A.M., Jacobi, C., Ruigrok, N., & van Atteveldt, W. (2014). Diverse politics, diverse news coverage? A longitudinal study of diversity in Dutch political news during two decades of election campaigns. *European Journal of Communication*, *29*(6), 668–686.

Vowe, G., & Dohle, M. (2007). Politische Kommunikation im Umbruch. Neue Forschung zu Akteuren, Medieninhalten und Wirkungen. *Politische Vierteljahresschrift*, *48(2),* 338–359.

Vliegenthart, R., Boomgaarden, H., van Aelst, P., & de Vreese, C.H. (2010). Covering the US Presidential election in Western Europe: A cross-national comparison. *Acta Politica,* 45, 444–467.

Vliegenthart, R., Boomgaarden H.G., & Boumans J.W. (2011). Changes in political news coverage: Personalization, conflict and negativity in British and Dutch newspapers. In K. Brants, & Voltmer, K. (Eds.), *Political Communication in Postmodern Democracy* (pp. 92–110). Basingstoke: Palgrave Macmillan.

Walgrave, S., & van Aelst, P. (2006). The contingency of the mass media's political agenda setting power: Toward a preliminary theory. *Journal of Communication*, 56(1), 88–109.

Walgrave, S., Soroka, S., & Nuytemans, M. (2008). The mass media's political agenda-setting power. A longitudinal analysis of media, parliament and government in Belgium (1993–2000). *Comparative Political Studies*, 41(6), 814–36.

Wied, K. (2007). *Der Wahlabend im deutschen Fernsehen. Wandel und Stabilität der Wahlberichterstattung*. Wiesbaden: VS Verlag für Sozialwissenschaften.

Wilke, J., Schäfer, C., & Leidecker, M. (2011). Mit kleinen Schritten aus dem Schatten. Haupt- und Nebenwahlkämpfe in Tageszeitungen am Beispiel der Bundestags- und Europawahlen 1979–2009. In J. Tenscher (Ed.), *Superwahljahr 2009. Vergleichende Analysen aus Anlass der Wahlen zum Deutschen Bundestag und zum Europäischen Parlament* (S. 155–179). Wiesbaden: VS Verlag für Sozialwissenschaften.

Wilke, J., & Leidecker, M. (2013). Regional – National – Supranational. How the German press covers election campaigns on different levels of the political system. *Central European Journal of Communication*, 6(1), 122–143.

Wilke, J., & Leidecker-Sandmann, M. (2018). Zwischen Gratwanderung und „Verpapstung eines Landesvaters". Die Presseberichterstattung über die Landtagswahlen in Rheinland-Pfalz und Baden-Württemberg 2016 – im Vergleich zu denjenigen 2011. *Studies in Communication | Media*, 7(1), 89–128.

Wilke, J., & Reinemann, C. (2000). *Kanzlerkandidaten in der Wahlkampfberichterstattung 1949–1998.* Köln, Weimar, & Wien: Böhlau.

Zeh, R., & Schulz, W. (2015). Fernsehnahrichten über Kanzlerkandidaten. Die Trends seit 1990. In C. Holtz-Bacha (Ed.), *Die Massenmedien im Wahlkampf. Die Bundestagswahl 2017* (pp. 173–188). Wiesbaden: Springer VS.

Zeh, R., & Schulz, W. (2019). Merkel und Schulz im Fernsehen und ein Blick zurück auf acht Wahlkämpfe. In C. Holtz-Bacha (Ed.), *Die (Massen-)Medien im Wahlkampf. Die Bundestagswahl 2013* (pp. 243–261). Wiesbaden: Springer VS.

Dr. Melanie Leidecker-Sandmann is a postdoctoral researcher at the Department of Science Communication at the Karlsruhe Institute of Technology, Germany. She holds a PhD in Communication Science from the Johannes Gutenberg-University of Mainz, Germany. Her research focuses on political communication, science communication as well as on journalism studies (especially quantitative media content analyses).





Content Analysis in the Research Field of War Coverage

Marc Jungblut

1 Introduction

To date, conflict research has struggled to agree upon a uniform definition of war. Whereas scholars agree that wars are a specifically severe and intense type of violent conflict, there is no unified way of clearly distinguishing the two. Following Wallensteen (2015), a conflict can be understood as "a social situation in which a minimum of two actors (parties) strive to acquire at the same moment in time an available set of scarce resources" (pp. 17–18). In this, resources should be conceptualized in a broad sense ranging from physical resources like money or gold, to territory or political power. Moreover, conflicts do not automatically emerge from an existing scarcity of resources, as they rather occur from the perception of conflicting aspirations of different actors (Meyer et al. 2018). Conflicts thereby can be differentiated based on several characteristics such as the involved actors (states, non-state actors or both), the issue of dispute (e.g. ideology, autonomy, resources), the type of conflict (interstate, intrastate, substate or transstate) or the level of conflict violence (for more details see: Heidelberg Institute for International Conflict Research 2019). In trying to distinguish conflicts from wars, scholars have mainly followed three approaches (cf. Heidelberg Institute for International Conflict Research 2019).

M. Jungblut (✉)
Institut für Kommunikationswissenschaft und Medienforschung,
Ludwig-Maximilians-Universität München, München, Germany
E-Mail: marc.jungblut@ifkw.lmu.de

F. Oehmer-Pedrazzi et al. (Hrsg.), *Standardisierte Inhaltsanalyse in der Kommunikationswissenschaft – Standardized Content Analysis in Communication Research,* https://doi.org/10.1007/978-3-658-36179-2_11

First, especially during the first half of the twentieth century, research has differentiated conflicts from wars based on the existence of an official declaration of war between the conflict parties (e.g. Wright 1951). Since this approach excludes a large variety of conflicts which are commonly considered to be a war, e.g. civil wars, this approach is widely regarded as outdated (Heidelberg Institute for International Conflict Research 2019). Second, quantitative definitions have described wars as conflicts with a high number of casualties. The Correlates of War Project, for instance, defines a war as a conflict with 1000 battle-related death in a given conflict year (Sarkees and Wayman 2010). This, however, means that during the course of a violent conflict the definition of said conflict can change between being a “war” and being a “conflict”, which seems counterintuitive. Finally, other scholars have advocated for a qualitative definition of war suggesting that the quality of conflict actions separates conflicts from wars. Here, the Heidelberg Institute for International Conflict Research (2019), for instance, proposes that a war is a violent conflict in which at least one conflict side uses a substantial degree of physical force against individuals. Moreover, the quality of conflict actions is also judged by the severity of used means (e.g. what kind of weapons are used) and the severity of the consequences of the use of violence (e.g. the number of casualties and refugees). Due to this multitude of definitions, scholars have widely avoided the label war coverage and mostly use the more general term (violent) conflict. To keep with this research tradition and since it is a nearly impossible task to retrospectively differentiate between research that analyzes a conflict and research to address a “proper” war, the terms war and violent conflict will be used interchangeably in the remainder of this chapter.

Despite the on-going debates about the definition of war, it is safe to say that we live in an age of conflicts. Following data by the Uppsala Conflict Data Program, the number of violent conflicts reached a peak after the year 2014 that was only matched by the early 1990s and resulted in a total number of 160 different conflicts in 2018 (Petterson et al. 2019). The analysis of how these conflicts are covered thereby draws its relevance from the fact that conflict is often mediated since most wars take place outside of people’s direct sphere of experience (Baden and Meyer 2018; Cottle 2006). Consequentially, war coverage can influence the perceived relevance of a conflict, the predominant interpretation of conflict events, the public’s attribution of conflict roles (e.g. victim, perpetrator or hero) and the public support for conflict interventions (e.g. Althaus and Kim 2006; Edy and Meirick 2007; Entman 2004; Iyengar and Simon 1993; McCombs and Shaw 1993). Moreover, violent conflicts have a very high news value as they fulfill many of the criteria that guide media attention (Eilders and Hagen 2005; Galtung and Ruge 1965; Harcup and O’Neill 2017). Violent conflicts are *relevant* and *negative* events that might endanger the wealth, freedom and safety of many people. In addition, as conflict events involve individuals (e.g. soldiers, victims, perpetrators) and their actions (e.g. fighting, looting or rescuing), they tend to be very personalized occurrences. Finally, even though conflicts often emerge from complex cultural, historical or political backgrounds, they “usually consist of clearly identifiable events or episodes such as

battles, invasions or peace negotiations" (Jungblut 2020, p. 4). As a result, war coverage has been a central component of news since the emergence of the mass media itself (Knightley 2004; Wilke 1995).

2 Theoretical Approaches and Frequent Research Questions in Content Analyses on War Coverage

Content analytical research on war coverage mostly focuses on two main research interests. They either analyze (1) how independent the media is from political influences or they examine (2) how (different types of) media cover conflicts. Each of these research interests thereby is relying on their own theoretical approaches.

The largest share of studies on war coverage seeks to analyze the independence of the press during violent conflicts (e.g. Aday 2010b; Althaus 2003; Bennett 1990; Hallin 1989; Robinson et al. 2009). In this, scholars try to find out whether or under which conditions journalists act as the "faithful servant" (Wolfsfeld 1997, p. 69) of the government helping them to legitimize conflict interventions and to increase the support for their conflict policies (e.g. Baker and Oneal 2001; Eilders and Lüter 2000; Glazier and Boydstun 2012; Hayes and Guardino 2010; Kutz 2014). Moreover, research also addresses the question of whether and under which conditions journalists act as a watchdog and whether critical news coverage can undermine the government's war-efforts or even influence their decision-making (e.g. Althaus et al. 1996; Bloch-Elkon 2007; Hallin 1989; Livingston and Eachus 1995).

Research on the relationship between media and politics has developed a variety of theoretical models that can be divided in three different groups (Brüggemann and Weßler 2009). Models of 'media omnipotence' argue that since we live in a media society, politicians that seek media attention have to adopt to the media logic to have any chance of entering the news discourse (Strömbäck and Esser 2014). The paradigm of 'media omnipotence', however, has received substantial critique. The main argument here is that in conflicts, media and politics are not equally powerful opponents, since political actors can at times restrict the media's access to information (Brüggemann and Weßler 2009). Models of 'political dominance' postulate a substantial influence of political actors on the news coverage (Brüggemann and Weßler 2009; Cottle 2006). One prominent example of these models is Bennett's (1990) Indexing Hypothesis that suggest that the spectrum of opinions expressed by relevant political elites determines the spectrum of opinions in the news coverage. Models of 'political dominance' has been criticized because they run the risk of viewing the media as passive information transmitters. These approaches often imply "that the action only occurs on the side of politics" (van Aelst and Walgrave 2016, p. 510). The third perspective can be labelled as models of 'political-media interdependence' (Brüggemann and Weßler 2009). These models suggest that the media's independence from political impact is influenced by contextual factors like characteristics of conflict events, variations in the political environment, professional

journalistic routines, characteristics of the media system, and cultural variations (Brüggemann and Weßler 2009; Jungblut 2020; Wolfsfeld 2011).

The second main area of research analyzes which conflicts are covered in the news (e.g. Hawkins 2002; Zerback and Holzleitner 2018) and how the media portrays them (e.g. Deprez and Raeymaeckers 2010; Entman 1991; Wolfsfeld 1997). Studies on the visibility of conflicts mainly rely on the agenda setting paradigm (McCombs and Shaw 1972), while research on how conflicts are covered oftentimes apply the framing approach (Entman 1993) to identify media bias in war coverage. As such, this branch of research extends the perspective of media's independence from political influences by analyzing the relevance of other influences (e.g. media logic, editorial line, ethnocentrism, journalism culture) on the way conflicts are covered. As a result, scholars have addressed the question of whether the news is biased towards one of the conflict parties (e.g. Deprez and Raeymaeckers 2010; Jungblut and Zakareviciute 2019; Sheafer and Gabay 2009; Wolfsfeld 1997), how ethnocentrism affects conflict coverage (Baden and Tenenboim-Weinblatt 2018; Entman 1991; Wolfsfeld et al. 2008) and whether the coverage of the same conflict differs cross-nationally (e.g. Dimitrova and Strömbäck 2008; Kim et al. 2007; Sheafer et al. 2014) or across different types of media outlets (e.g. Aday 2010a; Carpenter 2007).

3 Common Research Designs and Combinations of Methods

Research on war coverage has applied a diverse set of methodological approaches and combinations of methods. Similar to differences in the theoretical framework, the predominant methodological approach largely depends on the main research interest. Studies that analyze the interdependence or power relation between media and politics often do so by examining which voices and views can be found in the news coverage of a violent conflict. In doing so, they often make use of quantitative content analyses to unravel whether or to what degree official or elite statements dominate the media debate (e.g. Althaus 2003; Althaus et al. 1996; Eilders and Lüter 2000; Hallin 1989; Hayes and Guardino 2010; Robinson et al. 2009). A second set of studies applies different forms of input–output-analyses comparing how the government talks about war to how the media covers it (Glazier and Boydstun 2012; Jungblut 2020; Kutz 2014; Sheafer and Gabay 2009). A third and final branch of research on the independence and role of media in war combines content analysis with survey data to unravel under which conditions the news coverage can influence the public opinion on conflict interventions and thereby undermine or legitimize the government's conflict policies (e.g. Aday 2010b; Baker and Oneal 2001; Bloch-Elkon 2007; Gershkoff and Kushner 2005; Iyengar and Simon 1993).

Studies that analyze the visibility of different conflicts (e.g. Hawkins 2002; Zerback and Holzleitner 2018) or that examine how conflicts are portrayed in the news (e.g. Aday et al. 2005; Bennett et al. 2006; Wolfsfeld et al. 2008) predominantly make use of quantitative content analyses. In this, research that is focused on how conflict

events are framed in the news mostly applies deductive frame analyses (e.g. Deprez and Raeymaeckers 2010; Dimitrova and Strömbäck 2008; Entman 1991). Here, frames are first derived either from the existing literature or based on a small set of texts by different conflict actors and coded in the news coverage hereafter. Inductive framing analyses are less common in research on war coverage (e.g. Jungblut 2020; Jungblut and Zakareviciute 2019). In this approach, frame elements (problem definition, causal attribution, treatment recommendation and evaluation) are coded individually before reoccurring combinations of frame elements are identified by means of cluster analysis or latent class analysis (cf. Matthes and Kohring 2008).

In general, recent studies more and more apply comparative research designs, for instance by identifying reoccurring patterns in the coverage of different conflicts (e.g. Jungblut 2020; Baden and Tenenboim-Weinblatt 2018) or by comparing the news coverage of the same conflict across a set of media outlets (e.g. Sheafer et al. 2014). Moreover, research increasingly makes use of computational social science with the majority of studies either relying on dictionary-based approaches (e.g. Baden and Tenenboim-Weinblatt 2017, 2018; Jungblut 2020; Tenenboim-Weinblatt and Baden 2018) or using automated grammatical analyses (Sheafer et al. 2014; van Atteveldt et al. 2017). Finally, there is also a recent trend towards focusing on visual war coverage (e.g. Dobernig et al. 2010; Jungblut and Zakareviciute 2019; Schwalbe 2013).

4 Main Results for Relevant Variables and Constructs in War Coverage

Content analytical research on violent conflicts is very rich in quantity, yet it mostly consists of individual case studies (Baden and Tenenboim-Weinblatt 2018). In this, a significant part of existing research is focused on a few very salient conflicts, such as the Gulf War of 1990 (e.g. Althaus 2003; Iyengar and Simon 1993), the Kosovo conflict (e.g. Eilders and Lüter 2000; Kutz 2014), the Israel-Palestinian conflict (e.g. Deprez and Raeymaeckers 2010; Dobernig et al. 2010; Jungblut and Zakareviciute 2019; van Atteveldt et al. 2017; Wolfsfeld et al. 2008) or the post-9/11 wars in Iraq and Afghanistan (Aday 2010a, b; Bennet et al. 2006; Carpenter 2007; Hayes and Guardino 2010; Kutz 2014; Robinson et al. 2009). Despite this shortcoming, the rich quantity of existing research allows to identify some common characteristics and trends in studies on war coverage:

1. *The visibility of different conflicts:* Research that is mainly based on the agenda-setting paradigm (McCombs and Shaw 1972) has addressed the question which conflicts are salient in the coverage, which conflicts are only briefly mentioned and which are completely ignored. While most studies only point towards differences in the visibility of conflicts (e.g. Hawkins 2002, 2011), Zerback and Holzleitner (2018) also try to identify determinants of a conflict's media visibility, i.e. the quantity of

news coverage on a given conflict. For the case of Germany, they show that greater geographical distance to a conflict leads to less reporting. In contrast, the media visibility of a conflict is increased if the own armed forces are involved, if one of the conflict parties possesses nuclear weapons, and if the UN or EU imposes sanctions on one of the conflict parties. For political proximity, economic power and the number of conflict deaths, however, the study could not find a significant effect on the amount of media coverage.

2. *The independence of the press:* There is a vast body of research that aims to unravel if the government is able to influence the way the media characterizes violent conflicts. These studies oftentimes make use of the above described Indexing Hypothesis (Bennett 1990) that assumes that the spectrum of opinions reflected in media coverage is an index of the spectrum of opinions of relevant political elites. As a result, if the opposition does not question the government's policies, reporting is one-sided and in line with the government's position. These studies thereby measure the correspondence of elite and media discourse by analyzing the media's **framing of conflict** (Bennett et al. 2006; Eilders and Lüter 2000), by comparing the opinions expressed in Congressional Records to the one expressed in the media (Althaus et al. 1996; Zaller and Chiu 1996), or by analyzing the sources that are present in the news coverage (Althaus et al. 1996; Hayes and Guardino 2010). Overall, the majority of empirical studies from the USA and Europe point to a general validity of the hypothesis (Bennett et al. 2006; Eilders and Lüter 2000; Zaller and Chiu 1996). There are, however, also some valid concerns of an uncritical acceptance of the Indexing Hypothesis. Althaus and colleagues (1996), for example, demonstrate that in the absence of critical domestic voices, journalists often use foreign sources to present opinions contrary to the dominant political position.
3. *Bias in war coverage:* Studies that aim at identifying media bias in war coverage demonstrate that war coverage largely applies an ingroup-specific perspective (Baden 2014; Sheafer et al. 2014). In this, the ingroup perspective is echoed repeatedly and often uncritically, whereas outgroups are marginalized and discredited (Baden and Tenenboim-Weinblatt 2018). Research, for instance, shows that the quantity of new coverage on events that are congruent to the ingroup perspective tends to be larger than the amount of coverage on similar events that contradict the dominant ingroup perspective (Entman 1991). Moreover, war coverage largely tends to apply frames that are in line with the dominant ingroup perspective or with the perspective of conflict actors that are perceived as similar to us (Entman 1991; Jungblut 2020; Sheafer et al. 2014). Finally, this is also reflected in explicit evaluations of the conflict parties. There is some evidence that reporting on outgroups is generally more negative, and in some cases even dehumanizes the opponent (Baden and Tenenboim-Weinblatt 2018; Liebes 1997).
4. *Visual conflict coverage:* Research on visual war coverage mostly builds on the **framing** approach and either deductively measures pre-defined visual frames (Dobernig et al. 2010; Fahmy 2010; Schwalbe 2013) or inductively tries to

identify how conflict is framed by measuring the occurrence of frame elements and aggregating them to re-occurring frames by means of cluster analysis (Jungblut und Zakareviciute 2019). Research points towards two overall trends in visual war coverage. First, visual coverage tends to focus largely on the suffering of civilians. This is especially true for wars in which the own country is not directly involved. In asymmetrical conflicts, visual reporting is thus often biased in favor of the "weaker" conflict party (Dobernig et al. 2010; Jungblut and Zakareviciute 2019). Second, similarly to the textual conflict coverage, there is an ethnocentric perspective in visual war reporting. Thus, visual frames are emphasized that support in-group perspectives and legitimize government policy, while perspectives critical of the government tend to be sidelined or neglected (Fahmy 2010; Schwalbe 2013).

5 Research Desiderata

To be able to advance existing knowledge on war coverage, future research has to address at least four existing challenges. First, there is a need to move beyond the currently predominant case study designs and increasingly conduct comparative research that systematically compares how different types of conflicts from different regions of the world are covered in different types of media outlets in the context of different journalistic working environments. In doing so, studies will be able to identify generalizable patterns of news coverage and determinants that shape how conflict is covered, for instance by influencing the power relations between the press and politics or by posing a challenge for journalistic research. In this, research should also increasingly examine conflicts without a major Western involvement, since these conflicts are widely outside the scope of existing scholarship so far.

Second, existing conflict research contains a strong focus on a few moments of relative escalation (Baden and Tenenboim-Weinblatt 2018; Jungblut 2020; Wolfsfeld 2004). Consequentially, research on war coverage needs to extend its scope towards other conflict phases such as peace processes and situations of fragile peace. In doing so, studies will be able to analyze media's role in peace building, during times of transitional justice (cf. Golčevski et al. 2013) and in (re-)escalating conflict situations. Even more so, studies should also try to incorporate a longitudinal perspective to unravel how a conflict is covered during different conflict phases (Fröhlich et al. 2007).

Third, there is a need to stronger focus on visual conflict communication. Since conflicts are negative and at times spectacular events that happen outside of the audiences' direct sphere of experience, they are often described as highly visual occurrences meaning events in which visuals can be especially relevant and influential for the audience (Fahmy 2010; Jungblut and Zakareviciute 2019). As such, visual conflict coverage tends to capture the "drama that words cannot always convey" (Dobernig et al. 2010, p. 90) potentially leading to strong emotional effects such as distant suffering (Konstantinidou 2008). While content analyses on visual conflict

coverage is rare, there is some anecdotal knowledge of the impact of strong emotive visuals on public opinion (cf. Dahmen et al. 2018), for instance the raising of the American flag on Iwo Jima (Spratt et al. 2005) or the image of the execution of a captured Viet Cong officer by the chief of the South Vietnamese National Police (Bailey and Lichty 1972). By focusing stronger on the visual aspects and on multimodal conflict communication meaning the interplay between textual/verbal and visual elements, research will be able to get a deeper understanding of how conflicts are covered and how conflict coverage evokes emotions.

Finally, future research on war coverage should more fully embrace the potentials of computational social science. In doing so, studies will be able to identify re-occurring patterns in war coverage across time and, for example, demonstrate how significant changes in the geopolitical landscape such as the end of the cold war or 9/11 changed the way conflicts are reported. Moreover, computer vision, i.e. automated analyses of visual material, might be a promising approach to analyze large visual corpora (cf. Peng 2018) and therefore get a deeper understanding of visual war coverage.

Relevant Variables in DOCA—Database of Variables for Content Analysis

Visual deductive conflict frame: https://doi.org/10.34778/2n
Deductive conflict frame: https://doi.org/10.34778/2m

References

Aday, S. (2010a). Chasing the bad news: An analysis of 2005 Iraq and Afghanistan war coverage on NBC and Fox News Channel. *Journal of Communication, 60*(1), 144–164.

Aday, S. (2010b). Leading the charge: Media, elites, and the use of emotion in stimulating rally effects in wartime. *Journal of Communication*, *60*(3), 440–465.

Aday, S., Cluverius, J., & Livingston, S. (2005). As goes the statue, so goes the war: The emergence of the victory frame in television coverage of the Iraq War. *Journal of Broadcasting & Electronic Media*, *49*(3), 314–331.

Althaus, S. L. (2003). When news norms collide, follow the lead: New evidence for press independence. *Political Communication*, *20*(4), 381–414.

Althaus, S. L., Edy, J. A., Entman, R. M., & Phalen, P. (1996). Revising the indexing hypothesis: Officials, media, and the Libya crisis. *Political Communication*, *13*(4), 407–421.

Althaus, S. L., & Kim, Y. M. (2006). Priming effects in complex information environments: Reassessing the impact of news discourse on presidential approval. *The Journal of Politics, 68*(4), 960–976.

Baden, C. (2014). Constructions of violent conflict in public discourse. Conceptual framework for the content & discourse analytic perspective (within WP5, WP6, WP7, & WP8). INFOCORE Working Paper 2014/10. http://www.infocore.eu/wp-content/uploads/2016/02/Conceptual-Paper-MWG-CA_final.pdf

Baden, C., & Meyer, C. O. (2018). Dissecting media roles in conflict: A transactionist process model of conflict news production, dissemination and influence. In R. Fröhlich (Ed.), *Media in war and armed conflict. The dynamics of conflict news production and dissemination* (pp. 23–48). New York: Routledge.

Baden, C., & Tenenboim-Weinblatt, K. (2017), Convergent news? A longitudinal study of similarity and dissimilarity in the domestic and global coverage of the Israeli-Palestinian conflict. *Journal of Communication, 67*(1), 1–25.

Baden, C., & Tenenboim-Weinblatt, K. (2018). The search for common ground in conflict news research: Comparing the coverage of six current conflicts in domestic and international media over time. *Media, War & Conflict, 11*(1), 22–45.

Bailey, G. A., & Lichty, L. W. (1972). Rough justice on a Saigon street: A gatekeeper study of NBC's Tet execution film. Journalism Quarterly, 49(2), 221–238.

Baker, W. D., & Oneal, J. R. (2001). Patriotism or opinion leadership? The nature and origins of the "rally' round the flag" effect. *Journal of Conflict Resolution, 45*(5), 661–687.

Bennett, W. L. (1990). Toward a theory of press-state relations in the United States. *Journal of Communication, 40*(2), 103–127.

Bennett, W. L., Lawrence, R. G., & Livingston, S. (2006). None dare call it torture: Indexing and the limits of press independence in the Abu Ghraib scandal. *Journal of Communication, 56*(3), 467–485.

Bloch-Elkon, Y. (2007). Studying the media, public opinion, and foreign policy in international crises: The United States and the Bosnian crisis, 1992—1995. *Harvard International Journal of Press/Politics*, *12*(4), 20–51.

Brüggemann, M., & Weßler, H. (2009). Medien im Krieg. Das Verhältnis von Medien und Politik im Zeitalter transnationaler Konfliktkommunikation. In F. Marcinkowski & B. Pfetsch (Eds.), *Politik in der Mediendemokratie* (pp. 635–657). Wiesbaden: Springer VS.

Carpenter, S. (2007). US elite and non-elite newspapers' portrayal of the Iraq War: A comparison of frames and source use. *Journalism & Mass Communication Quarterly*, *84*(4), 761–776.

Cottle, S. (2006). *Mediatized conflict: Understanding media and conflicts in the contemporary world.* New York: Open University Press.

Dahmen, N. S., Mielczarek, N., & Perlmutter, D. D. (2018). The influence-network model of the photojournalistic icon. *Journalism & Communication Monographs, 20*(4), 264–313.

Deprez, A., & Raeymaeckers, K. (2010). Framing the first and second Intifada: A longitudinal quantitative research design applied to the Flemish press. *European Journal of Communication, 25*(1), 3–23.

Dimitrova, D. V., & Strömbäck, J. (2008). Foreign policy and the framing of the 2003 Iraq War in elite Swedish and US newspapers. *Media, War & Conflict, 1*(2), 203–220.

Dobernig, K. Lobinger, K., & Wetzstein, I. (2010). Covering conflict: Differences in visual and verbal news coverage of the Gaza crisis 2009 in four weekly news media. *Journal of Visual Literacy 29*(1), 88–105.

Edy, J. A., & Meirick, P. C. (2007). Wanted, dead or alive: Media frames, frame adoption, and support for the war in Afghanistan. *Journal of Communication, 57*(1), 119–141.

Eilders, C., & Hagen, L. M. (2005). Kriegsberichterstattung als Thema kommunikationswissenschaftlicher Forschung. Ein Überblick zum Forschungsstand und den Beiträgen in diesem Themenheft. *Medien & Kommunikationswissenschaft, 53*(2–3), 205–221.

Eilders, C., & Lüter, A. (2000). Research note: Germany at war: competing framing strategies in German public discourse. *European Journal of Communication, 15*(3), 415–428.

Entman, R. M. (1991). Symposium framing US coverage of international news: Contrasts in narratives of the KAL and Iran air incidents. *Journal of Communication, 41*(4), 6–27.

Entman, R. M. (1993). Framing: Toward clarification of a fractured paradigm. *Journal of Communication, 43*(4), 51–58.
Entman, R. M. (2004). *Projections of power: Framing news, public opinion, and US foreign policy*. Chicago: University of Chicago Press.
Fahmy, S. (2010). Contrasting visual frames of our times: A framing analysis of English- and Arabic-language press coverage of war on terrorism. *International Communication Gazette, 72*(8), 695–717.
Fröhlich, R., Scherer, H., & Scheufele, B. (2007). Kriegsberichterstattung in deutschen Qualitätszeitungen. Eine inhaltsanalytische Langzeitstudie zu Framingprozessen. *Publizistik, 52*(1), 11–32.
Galtung, J., & Ruge, M. H. (1965). The structure of foreign news: The presentation of the Congo, Cuba and Cyprus crises in four Norwegian newspapers. *Journal of Peace Research, 2*(1), 64–90.
Gershkoff, A., & Kushner, S. (2005). Shaping public opinion: The 9/11-Iraq connection in the Bush administration's rhetoric. *Perspectives on Politics, 3*(3), 525–537.
Glazier, R. A., & Boydstun, A. E. (2012). The president, the press, and the war: A tale of two framing agendas. *Political Communication, 29*(4), 428–446.
Golčevski, N., von Engelhardt, J., & Boomgaarden, H. G. (2013). Facing the past: Media framing of war crimes in post-conflict Serbia. *Media, War & Conflict, 6*(2), 117–133.
Hallin, D. C. (1989). *The uncensored war: The media and Vietnam*. Berkeley: University of California Press.
Harcup, T., & O'Neill, D. (2017). What is news? News values revisited (again). *Journalism Studies, 18*(12), 1470–1488.
Hawkins, V. (2002). The other side of the CNN factor: The media and conflict. *Journalism Studies, 3*(2), 225–240.
Hawkins, V. (2011). Media selectivity and the other side of the CNN effect: The consequences of not paying attention to conflict. *Media, War & Conflict, 4*(1), 55–68.
Hayes, D., & Guardino, M. (2010). Whose views made the news? Media coverage and the march to war in Iraq. *Political Communication, 27*(1), 59–87.
Heidelberg Institute for International Conflict Research. (2019). Conflict Barometer 2018. Retrieved from https://hiik.de/2019/02/26/conflict-barometer-2018/?lang=en
Iyengar, S., & Simon, A. (1993). News coverage of the Gulf crisis and public opinion: A study of agenda-setting, priming, and framing. *Communication Research, 20*(3), 365–383.
Jungblut, M, (2020). *Strategic communication and its role in conflict news. A computational analysis of the international news coverage on four conflicts.* Springer VS.
Jungblut, M., & Zakareviciute, I. (2019). Do pictures tell a different story? A multimodal frame analysis of the 2014 Israel-Gaza conflict. *Journalism Practice, 13*(2), 206–228.
Kim, J. H., Su, T. Y., & Hong, J. (2007). The influence of geopolitics and foreign policy on the US and Canadian media: An analysis of newspaper coverage of Sudan's Darfur conflict. *Harvard International Journal of Press/Politics,12*(3), 87–95.
Knightley, P. (2004). *The first casualty: The war correspondent as hero and myth-maker from the Crimea to Iraq*. Baltimore: John Hopkins University Press.
Konstantinidou, C. (2008). The spectacle of suffering and death: The photographic representation of war in Greek newspapers. *Visual Communication, 7*(2), 143–169.
Kutz, M.-S. (2014). *Öffentlichkeitsarbeit in Kriegen: Legitimation von Kosovo-, Afghanistan- und Irakkrieg in Deutschland und den USA*. Wiesbaden: Springer VS.

Liebes, T. (1997). Reporting the Arab-Israeli Conflict: How Hegemony Works. London: Routledge.
Livingston, S., & Eachus, T. (1995). Humanitarian crises and US foreign policy: Somalia and the CNN effect reconsidered. *Political Communication, 12*(4), 413–429.
Matthes, J., & Kohring, M. (2008). The content analysis of media frames: Toward improving reliability and validity. *Journal of Communication, 58*(2), 258–279.
McCombs, M. E., & Shaw, D. L. (1972). The agenda-setting function of mass media. *Public Opinion Quarterly, 36*(2), 176–187.
McCombs, M. E., & Shaw, D. L. (1993). The evolution of agenda-setting research: Twenty-five years in the marketplace of ideas. Journal of Communication, 43(2), 58–67.
Meyer, C. O., Baden, C., & Frère, M.-S. (2018). Navigating the complexities of media roles in conflict: The INFOCORE approach. *Media, War & Conflict, 11*(1), 3–21.
Peng, Y. (2018). Same candidates, different faces: Uncovering media bias in visual portrayals of presidential candidates with computer vision. *Journal of Communication, 68*(5), 920–941.
Pettersson, T., Högbladh, S., & Öberg, M. (2019). Organized violence, 1989–2018 and peace agreements. *Journal of Peace Research, 56*(4), 589–603.
Robinson, P., Goddard, P., Parry, K., & Murray, C. (2009). Testing models of media performance in wartime: U.K. TV news and the 2003 invasion of Iraq. *Journal of Communication, 59*(3), 534–563.
Sarkees, M. R. & Wayman, F. (2010). *Resort to War: 1816–2007.* Washington DC: CQ Press.
Schwalbe, C. B. (2013). Visually framing the invasion and occupation of Iraq in Time, Newsweek, and US News & World Report. *International Journal of Communication 7*, 239–262.
Sheafer, T., & Gabay, I. (2009). Mediated public diplomacy: A strategic contest over international agenda building and frame building. *Political Communication, 26*(4), 447–467.
Sheafer, T., Shenhav, S. R., Takens, J., & van Atteveldt, W. (2014). Relative political and value proximity in mediated public diplomacy: The effect of state-level homophily on international frame building. *Political Communication, 31*(1), 149–167.
Spratt, M., Peterson, A., & Lagos, T. (2005). Of photographs and flags: Uses and perceptions of an iconic image before and after September 11, 2001. *Popular Communication, 3*(2), 117–136.
Strömbäck, J., & Esser, F. (2014). Mediatization of politics: Towards a theoretical framework. In F. Esser & J. Strömbäck (Eds.), *Mediatization of politics: Understanding the transformation of Western democracies* (pp. 3–28). London: Palgrave Macmillan UK.
Tenenboim-Weinblatt, K., & Baden, C. (2018). Gendered communication styles in the news: An algorithmic comparative study of conflict coverage. *Communication research*, Online First.
van Aelst, P., & Walgrave, S. (2016). Information and arena: The dual function of the news media for political elites. *Journal of Communication, 66*(3), 496–518.
van Atteveldt, W., Sheafer, T., Shenhav, S. R., & Fogel-Dror, Y. (2017). Clause analysis: Using syntactic information to automatically extract source, subject, and predicate from texts with an application to the 2008–2009 Gaza War. *Political Analysis, 25*(2), 207–222.
Wallensteen, P. (2015). *Understanding conflict resolution* (Fourth Edition ed.). Los Angeles, London, New Dehli, Singapore, Washington D.C.: Sage.
Wilke, J. (1995). Krieg als Medienereignis. Konstanten und Wandel eines endlosen Themas. In K. Imhof & P. Schulz (Eds.), *Medien und Krieg – Krieg in den Medien* (pp. 21–35). Zürich: Seismo Verlag.

Wolfsfeld, G. (1997). *Media and political conflict: News from the Middle East*. Cambridge: Cambridge University Press.
Wolfsfeld, G. (2004). *Media and the path to peace.* Cambridge: Cambridge University Press.
Wolfsfeld, G. (2011). *Making sense of media and politics: Five principles in political communication*. New York, London: Routledge.
Wolfsfeld, G., Frosh, P., & Awabdy, M. T. (2008). Covering death in conflicts: Coverage of the second Intifada on Israeli and Palestinian television. *Journal of Peace Research, 45*(3), 401–417.
Wright, Q. (1951). *A study of war. Volume 1*. Fifth Edition. Chicago: University of Chicago Press.
Zaller, J., & Chiu, D. (1996). Government's little helper: US press coverage of foreign policy crises, 1945–1991. *Political Communication, 13*(4), 385–405.
Zerback, T., & Holzleitner, J. (2018). Under-cover: The influence of event-and context-traits on the visibility of armed conflicts in German newspaper coverage (1992–2013). *Journalism, 19*(3), 366–383.

Dr. Marc Jungblut is a postdoctoral researcher at the Department of Media and Communication at LMU Munich. His research focuses on the role of media in conflict, computational social science and strategic communication.



Content Analysis in the Research Field of Terrorism Coverage

Liane Rothenberger und Valerie Hase

1 Introduction

Terrorism research has seen an increase in scholarly debate and empirical studies since the 1970s, with an abrupt rise after the September 11, 2001 attacks (Jones 2007; Kocks et al. 2011; Miller and Mills 2009). Terrorism studies is an interdisciplinary research field, with most studies stemming from disciplines such as political studies, psychology, and sociology and only a few from journalism or media studies (Jones 2007; Silke 2004). The relationship between journalism and terrorism has been described as symbiotic (Elter 2008; Miller 1982; Surette et al. 2009; Wilkinson 1987), meaning that the two are mutually dependent. Terrorists rely on the media to make their acts and atrocities public and reach a wider audience; journalists cannot refuse to report about a terrorist act because of their function as news providers. Moreover, terrorism is a newsworthy topic, so coverage will lead to higher economic revenue. However, some researchers have described the relationship as parasitic rather than symbiotic (Schaffert 1992; Schultz 2017) because terrorists "force" the media to report. This can be regarded as an act of

L. Rothenberger (✉)
KU Eichstätt-Ingolstadt, Studiengang Journalistik, Eichstätt, Deutschland
E-Mail: liane.rothenberger@ku.de

V. Hase
Department of Media and Communication, LMU Munich, München, Deutschland
E-Mail: valerie.hase@ifkw.lmu.de

F. Oehmer-Pedrazzi et al. (Hrsg.), *Standardisierte Inhaltsanalyse in der Kommunikationswissenschaft – Standardized Content Analysis in Communication Research*, https://doi.org/10.1007/978-3-658-36179-2_12

exploitation in which the parasite (the terrorists) (mis)uses the functions of the media that are obliged to report important events to the public.

Common research questions in content analyses include a focus on which terrorist attacks make it into the headlines (Sui et al. 2017; Weimann and Brosius 1991), coverage, labeling, and framing of violent groups (Dunn et al. 2005; Hellmueller et al. 2022); Zhang and Hellmüller 2016), and—to a lesser extent—coverage of individual terrorists (Knight 2007). Studies examining news values, for instance, find that attacks in Western countries with a high number of fatalities and attacks by Muslim perpetrators are considered more newsworthy by the Western media (Hase 2021; Kearns et al. 2019). Studies also analyze radicalization narratives in the media (Auer et al. 2019; Nacos 2005) and radicalizing narratives in terrorist propaganda (Ingram 2017; Mahood and Rane 2017) with the latter strand of research illustrating that terrorists focus on identity building via in- and out-group dichotomy, crisis reinforcement, and depiction of violence and military success (Colas 2017; Lorenzo-Dus et al. 2018; Rothenberger et al. 2018). Research also includes audience reactions to attacks on social media (Fischer-Preßler et al. 2019). Single case studies prevail, but we find comparative angles across these lines of research (e.g., through comparisons by group, ideology, or motivation of the attack) (Decker and Rainey 1982) or by media from various countries (Peralta Ruiz 2000). Content analyses across media channels (e.g., TV and print coverage), however, are not common.

2 Common Research Designs and Combinations of Methods

Frequent study designs include quantitative and qualitative content analyses of legacy and non-legacy media and of political statements and speeches, with the formal research object being texts and, to a lesser extent, images or videos (Gerstenfeld 2003; Beuthner et al. 2003). We also find surveys and experiments on the understanding and effects of terrorism or terrorism coverage from the recipients' perspective (Huff and Kertzer 2018; Shoshani and Slone 2008), while surveys concerning the communicators (be it journalists, politicians, or terrorists) are missing. Guided interviews reconstructing working routines have sometimes been used (Konow-Lund and Olsson 2016), but observations of journalists' working routines in times of terror are largely missing.

The main method of scientific data collection and analysis used in research on terrorism and media is content analysis, mostly of articles in Western print media. A review of the state of research revealed a strong focus on content analyses of print and television coverage of specific terrorist acts (event centered) and few analyses of background information during attacks (context centered) (Rothenberger 2022). Discourse analyses and longitudinal comparative studies are less frequent. Traditional manual content analyses are the most common, but computational methods, such as automated content analysis or network analysis, are increasingly used, such as to uncover journalistic sourcing (Rauchfleisch et al. 2017) or automatically analyze topics of social media discussions on terrorism (Fischer-Preßler et al. 2019). Some studies also combine media data with extra-media

data such as databases recording terrorist attacks and their characteristics (Hase 2021; Hellmueller et al. 2022). Knelangen (2009) examined the pros and cons of qualitative versus quantitative terrorism research. He concluded that it is ultimately the research question that decides which method or combination of methods is appropriate.

Concerning the research object, there is a lack of content analyses of radio programs and of ethnographic studies of terrorists' daily lives in the respective areas, including observations of their media use (Ross 2007). Although Gerstenfeld's (2003) content analysis of 157 extremist websites concluded that the internet is a particularly powerful and effective instrument for extremists to reach an international audience, recruit members, network with other groups, and enable a high level of image control, content analyses of traditional mass media are still most common.

If we follow the order determined by the course of communication from the attack to the audience, we have studies dealing with terrorists' utterances on the internet (An et al. 2018), media coverage (with word choice playing an important role during the journalistic production phase) (Badr 2017; Glück 2007), and the effects on recipients, including emotional reception (Haußecker 2013).

One always has to take into account that normative prescriptions of how to cover terrorism may change over time according to editorial guidelines (e.g., insofar as a TV channel speaks of "martyrs" or not or whether perpetrators are named and visualized). Beermann (2004), Cohen-Almagor (2005) and Schmid (1992) notice many differences in editorial policies and coherence of using the label "terrorism". According to Beermann (2004), the Reuters news agency, for example, does not refer to specific events as "terrorism" since the 1960s.

3 Main Constructs

While studies deal with different research objects (e.g., terrorist attacks, terrorist groups, single terrorists, or radicalization) and use different methods of analysis, spanning from computational to discourse analysis, six variables are measured repeatedly:

1. **Key issue:** Many studies analyze the key issue in an article (i.e., what aspect is emphasized when it comes to terrorism). Studies thereby differentiate between descriptions of a terrorist attack and its course, the severity and consequences of an attack, political reactions in the form of official statements by politicians, military reactions in the form of the "war against terror," and how to counter terrorism as key issues (Guzek 2019; Mogensen et al. 2002; Zhang and Hellmüller 2016).
2. **Sources:** Many studies analyze frequent sources used in terrorism coverage. They find that government officials/politicians are predominantly sourced, but so are other media outlets/news agencies, security/police, witnesses/ordinary people, or terrorists themselves (Matthews 2013; Venger 2019; Zhang and Hellmüller 2016). As social media allows for quick updates, the use of Twitter, for example, normalized over time (Bennett 2016).

3. **Labeling of groups and events:** Content analyses also examine labels of violent events and groups (i.e., what attacks and perpetrators are called in news coverage). Labeling is an important aspect of coverage, as different labels for groups (e.g., "terrorists" vs. "freedom fighters") and incidents (e.g., "terrorist attack" vs. "crime") attach dissimilar normative associations and motives (Bhatia 2005). Military action against a perpetrator, for example, might be more easily supported if that person is explicitly labeled a "terrorist" (Baele et al. 2019), as the term implies "that a given action is illegitimate" (Steuter 1990, p. 261) and thus legitimizes military reactions. This might also be why news media generally tend to be cautious about attaching that label (Nagar 2010).
   Studies operationalizing such labeling differentiate between labels for events (e.g., "attack," "explosion," "seizure") and groups (e.g., "rebel," "terrorist," "murderer") and find that these vary with incident and perpetrator characteristics and by who is providing the description (Elmasry and el-Nawawy 2020; Lavie-Dinur et al. 2018; Hase 2021; Simmons and Lowry 1990). With the rise of religious terrorism, many studies find that outlets have created new labels connecting Islam and terrorism (e.g., "radical Islam" or "Islamic terrorists") (Mahony 2010).
4. Radicalization narratives: News media try to make sense of the radicalization of especially young people by constructing narratives around their turn toward terrorism and attributing certain reasons for that choice. Common media explanations proposed for the radicalization of (mostly male) adolescents are religious fanaticism, being the victim of brainwashing by extremists, or naively joining in search for an adventure (Berbers et al. 2016). Interestingly, studies find these radicalization narratives to be gendered: when the media describes suspected female terrorists, it concentrates more on their physical appearance, sexuality, supposed naivety, and troubling social life (Conway and McInerney 2012; Martini 2018; Nacos 2005).
5. Emotionalization: Emotionalization is another aspect of coverage and can be operationalized as a the inclusion of persons who express or are ascribed emotions in text or images (Gerhards et al. 2011). Unsurprisingly, studies find around half the coverage to be emotionalized (Wolf 2010) and that the dominant emotions are mostly implicit and negative, such as sorrow, fear, and devastation (Gerhards et al. 2011).
6. Visualization: In addition, research shows that visualization (operationalized, for example, as the number of visuals accompanying textual coverage or what is shown on these) plays an important role for memorial purposes, personification, and calls for solidarity in the wake of an attack. Studies on visualization thereby differentiate between the visuals shown (e.g., if buildings, memorial gatherings, victims, perpetrators, or flags are displayed in news or social media content) (Berkowitz 2017; Beuthner et al. 2003; Kim 2012). Interestingly, violence—an inherent part of terrorism—is more likely to be illustrated in the form of destroyed buildings than mutilations/wounded people. Legacy media mostly show dead people as covered up (Jirschitzka et al. 2010; Linder 2011)—in contrast to propaganda content, where violent images often are part of the terrorists' message (Winkler et al. 2019).

4 Research Desiderata

This overview clarified that the operationalization of terrorism-related variables remains a challenge. Terrorism as a label that signifies an asymmetric relation always includes a component of "power" that manifests in media content. As only few international studies outside of the US and "the West" exist, it is usually the US/Western perspective on terrorism that we find in empirical studies (this is to some extent also due to language barriers and thus the international visibility of research). Further, analyses often deal with spectacular, singular attacks in Western countries instead of including a broader view (e.g., by including longitudinal coverage of certain groups or radicalization narratives). The selection of studies in this article accordingly reflects this bias.

Content analyses of web content face the difficulty of coping with a plethora of texts and visuals, from politicians, journalists, citizen journalists, extremists, terrorists, etc. Computer-assisted methods of data collection (e.g., scraping) and data analysis (e.g., automated content analyses) are required to deal with such "big data" but are—as of yet—rarely applied. Additionally, it is not only the commonly known web that is of interest to terrorism researchers: "terrorists'/extremists' internet usage is still under-researched because of the lack of systematic Dark Web content collection and analysis methodologies" (Quin et al., 2006, p. 4). Another problem of content analyses in the field of terrorism studies is that many miss a close link to a coherent theoretical framework guiding the research. Beck and Quandt (2011) complain about many of the content analyses after the September 11 attacks that were published under great pressure of topicality and that leave it unclear to what extent journalism and communication studies can provide a theoretical understanding of the phenomenon.

Relevant Variables in DOCA—Database of Variables for Content Analysis
Key issue: https://doi.org/10.34778/2u
Sources: https://doi.org/10.34778/2w
Labeling of groups and events: https://doi.org/10.34778/2v

References

An, Y., Mejía, N. A., Arizi, A., Villalobos, M. M, & Rothenberger, L. (2018). Perpetrators' strategic communication: Framing and identity building on ethno-nationalist terrorists' websites. *Communications*, *43*(2), 133–171.

Auer, M., Sutcliffe, J., & Lee, M. (2019). Framing the 'White Widow': Using intersectionality to uncover complex representations of female terrorism in news media. *Media, War & Conflict*, *12*(3), 281–298.

Badr, H. (2017). *Framing von Terrorismus im Nahostkonflikt: Eine Analyse deutscher und ägyptischer Printmedien* [Framing terrorism in the mideast conflict: An analysis of German and Egypt print media]. Wiesbaden: Springer VS.

Baele, S. J., Sterck, O. C., Slingeneyer, T., & Lits, G. P. (2019). What does the “terrorist” label really do? Measuring and explaining the effects of the “terrorist” and “Islamist” categories. *Studies in Conflict & Terrorism*, *42*(5), 520–540.

Beck, K., & Quandt, T. (2011). Terror als Kommunikation? Was Handlungstheorie, Rational Choice-, Netzwerk- und Systemtheorie aus kommunikationswissenschaftlicher Sicht zur Erklärung leisten [Terror as communication? The contribution of action theory, rational choice, network, and systems theory to an explanation from a communication studies perspective]. In T. Quandt & B. Scheufele (Eds.), *Ebenen der Kommunikation* [Levels of communication] (pp. 85–110).

Beermann, T. (2004). *Der Begriff „Terrorismus“ in deutschen Printmedien. Eine empirische Studie* [The term “terrorism” in German print media. An empirical study]. Münster: LIT-Verlag.

Bennett, D. (2016). Sourcing the BBC’s live online coverage of terror attacks. *Digital Journalism*, *4*(7), 861–874.

Berbers, A., Joris, W., Boesman, J., d’Haenens, L., Koeman, J., & Van Gorp, B. (2016). The news framing of the ‘Syria fighters’ in Flanders and the Netherlands: Victims or terrorists? *Ethnicities*, *16*(6), 798–818.

Berkowitz, D. (2017). Solidarity through the visual: Healing images in the Brussels terrorism attacks. *Mass Communication and Society*, *20*(6), 740–762.

Beuthner, M., Buttler, J., Fröhlich, S., Neverla, I., & Weichert, S. A. (2003). *Bilder des Terrors – Terror der Bilder? Krisenberichterstattung am und nach dem 11. September* [Images of terror – terror of images? Crisis coverage on and after September 11]. Köln: Herbert von Halem Verlag.

Bhatia, M. V. (2005). Fighting words: Naming terrorists, bandits, rebels and other violent actors. *Third World Quarterly*, *26*(1), 5–22.

Cohen-Almagor, R. (2005). Media coverage of acts of terrorism: Troubling episodes and suggested guidelines. *Canadian Journal of Communication*, *30*, 383–409.

Colas, B. (2017). What does Dabiq do? ISIS hermeneutics and organizational fractures within Dabiq Magazine. *Studies in Conflict & Terrorism*, *40*(3), 173–190.

Conway, M., & McInerney, L. (2012). What’s love got to do with it? Framing ‘JihadJane’ in the US press. *Media, War & Conflict*, *5*(1), 6–21.

Decker, W., & Rainey, D. (1982, November). Media and terrorism. Toward the development of an instrument to explicate their relationship. Retrieved from https://files.eric.ed.gov/fulltext/ED224060.pdf

Dunn, E. W., Moore, M., & Nosek, B. A. (2005). The war of the words: How linguistic differences in reporting shape perceptions of terrorism. *Analyses of Social Issues and Public Policy*, *5*(1), 67–86.

Elmasry, M. H., & el-Nawawy, M. (2020). Can a non-Muslim mass shooter be a “terrorist”?: A comparative content analysis of the Las Vegas and Orlando shootings. *Journalism Practice*, *14*(7), 63-879.

Elter, A. (2008). *Propaganda der Tat. Die RAF und die Medien* [Propaganda of the deed. The RAF and the media]. Frankfurt am Main: Suhrkamp.

Ette, M., & Joe, S. (2018). ‘Rival visions of reality’: An analysis of the framing of Boko Haram in Nigerian newspapers and Twitter. *Media, War & Conflict*, *11*(4), 392–406.

Fischer-Preßler, D., Schwemmer, C., & Fischbach, K. (2019). Collective sense-making in times of crisis: Connecting terror management theory with Twitter user reactions to the Berlin terrorist attack. *Computers in Human Behavior*, *100*, 138–151.

Gerhards, J., Schäfer, M., Al-Jabiri, I., & Seifert, J. (2011). *Terrorismus im Fernsehen. Formate, Inhalte und Emotionen in westlichen und arabischen Sendern* [Terrorism on TV. Formats, contents, and emotions in Western and Arab channels]. Wiesbaden: VS Verlag für Sozialwissenschaften.

Gerstenfeld, P. B., Grant, D. R., & Chiang, C.-P. (2003). Hate online: A content analysis of extremist internet sites. *Analyses of Social Issues and Public Policy*, *3*(1), 29–44.

Glück, C. (2007). ETA und die Medien [ETA and the media]. In S. Glaab (Ed.), *Medien und Terrorismus – Auf den Spuren einer symbiotischen Beziehung* [Media and Terrorism - illustrating a symbiotic relationship] (pp. 17–30). Berlin: BMV Berliner Wissenschafts-Verlag GmbH.

Guzek, D. (2019). Religious motifs within reporting of the 7/7 London bombings in the United Kingdom, the United States, and Poland: A transnational agenda-setting network study. *Journalism*, *20*(10), 1323–1342.

Hase, V. (2021). What is terrorism (according to the news)? How the German press selectively labels political violence as "terrorism". *Journalism*. Advance Online Publication. https://doi.org/10.1177/14648849211017003.

Haußecker, N. (2013). *Terrorismusberichterstattung in Fernsehnachrichten: Visuelles Framing und emotionale Reaktionen* [Terrorism coverage on TV: visual framing and emotional reactions]. Baden-Baden: Nomos.

Hellmueller, L., Hase, V., & Lindner, P. (2022). Terrorist Organizations in the News: A Computational Approach to Measure Media Attention Toward Terrorism. *Mass Communication and Society*, *25*(1), 134–157.

Huff, C., & Kertzer, J. D. (2018). How the public defines terrorism. *American Journal of Political Science*, *62*(1), 55–71.

Ingram, H. J. (2017). An analysis of inspire and Dabiq: Lessons from AQAP and Islamic State's propaganda war. *Studies in Conflict & Terrorism*, *40*(5), 357–375.

Jirschitzka, J., Haußecker, N., & Frindte, W. (2010). Mediale Konstruktion II: Die Konstruktion des Terrorismus im deutschen Fernsehen – Ergebnisdarstellung und Interpretation. [Media construction II: the construction of terrorism in German TV - results and interpretation]. In W. Frindte & N. Haußecker (Eds.), *Inszenierter Terrorismus* [Staged terrorism] (pp. 81–119). Wiesbaden: VS Verlag für Sozialwissenschaften.

Jones, A. (2007). Terrorism studies: Theoretically under-developed? Retrieved from http://www.e-ir.info/2007/12/22/terrorism-studies-theoretically-under-developed/

Kearns, E. M., Betus, A. E., & Lemieux, A. F. (2019). Why do some terrorist attacks receive more media attention than others? *Justice Quarterly*, *36*(6), 985–1022.

Kim, Y. S. (2012). News images of the terrorist attacks: Framing September 11th and its aftermath in the pictures of the year international competition. *Atlantic Journal of Communication*, *20*(3), 158–184.

Knelangen, W. (2009). Terrorismus – Im Zentrum der politischen Debatte, immer noch an den Rändern der Forschung [Terrorism – At the heart of the political debate, on the brink of research]? In H.-J. Lange, H.P. Ohly & J. Reichertz (Eds.), *Auf der Suche nach neuer Sicherheit: Fakten, Theorien und Folgen* [In search of new security: facts, theories and consequences] (pp. 75–88). Wiesbaden: VS Verlag für Sozialwissenschaften.

Knight, A. (2007). Jihad and cross-cultural media: Osama bin Laden as reported in the Asian press. *Pacific Journalism Review*, *13*(2), 155–174.

Kocks, A., Harbrich, K., & Spencer, A. (2011). Die Entwicklung der deutschen Terrorismusforschung: Auf dem Weg zu einer ontologischen und epistemologischen Bestandsaufnahme [Development of German terrorism research: inventory-taking of ontologies and epistemologies.] In A. Spencer, A. Kocks & K. Harbrich (Eds.), *Terrorismusforschung in Deutschland* [Terrorism research in Germany] (pp. 9–21). Wiesbaden: VS Verlag für Sozialwissenschaften.

Konow-Lund, M., & Olsson, E.-K. (2016). When routines are not enough: Journalists' crisis management during the 22/7 domestic terror attack in Norway. *Journalism Practice*, *10*(3), 358–372.

Lavie-Dinur, A., Yarchi, M., & Karniel, Y. (2018). The portrayal of lone wolf terror wave in Israel: An unbiased narrative or agenda driven? *The Journal of International Communication*, *24*(2), 196–215.

Linder, B. (2011). *Terror in der Medienberichterstattung* [Terrorism in media coverage]. Wiesbaden: VS Verlag für Sozialwissenschaften.

Lorenzo-Dus, N., Kinzel, A., & Walker, L. (2018). Representing the West and "non-believers" in the online jihadist magazines Dabiq and Inspire. *Critical Studies on Terrorism*, *11*(3), 521–536.

Mahony, I. (2010). Diverging frames: A comparison of Indonesian and Australian press portrayals of terrorism and Islamic groups in Indonesia. *International Communication Gazette*, *72*(8), 739–758.

Mahood, S., & Rane, H. (2017). Islamist narratives in ISIS recruitment propaganda. *The Journal of International Communication*, *23*(1), 15–35.

Martini, A. (2018). Making women terrorists into "Jihadi brides": An analysis of media narratives on women joining ISIS. *Critical Studies on Terrorism*, *11*(3), 458–477.

Matthews, J. (2013). News narratives of terrorism: Assessing source diversity and source use in UK news coverage of alleged Islamist plots. *Media, War & Conflict*, *6*(3), 295–310.

Miller, A. H. (1982). *Terrorism, the media and the law.* Dobbs Ferry: Transnational Publishers.

Miller, D., & Mills, T. (2009). The terror experts and the mainstream media: The expert nexus and its dominance in the news media. *Critical Studies on Terrorism*, *2*(3), 414–437.

Mogensen, K., Lindsay, L., Perkins, J., & Beardsley, M. (2002). How TV news covered the crisis: The content of CNN, CBS, ABC, NBC and Fox. In B. S. Greenberg (Ed.), *Communication and terrorism: Public and media responses to 9/11* (pp. 101–120). Cresskill, N.J: Hampton Press.

Nacos, B. L. (2005). The portrayal of female terrorists in the media: Similar framing patterns in the news coverage of women in politics and in terrorism. *Studies in Conflict & Terrorism*, *28*(5), 435–451.

Nagar, N. (2010). Who is afraid of the T-word? Labeling terror in the media coverage of political violence before and after 9/11. *Studies in Conflict & Terrorism*, *33*(6), 533–547.

Peralta Ruiz, V. (2000). *Sendero Luminoso y la Prensa, 1980–1994. La violencia política peruana y su representación en los medios* [Sendero Luminoso/Shining path in the press, 1980–1994. Peruvian political violence and its representation in the media]. Cuzco: SUR Casa de Estudios del Socialismo.

Quin, J., Reid, E., Lai, G., & Chen, H. (2006). Unraveling international terrorist groups' exploitation of the web: Technical sophistication, media richness, and web interactivity. In H. Chen, F.-Y. Wang, C. C. Yang, D. Zeng, M. Chau, & K. Chang (Eds.), *Intelligence and Security Informatics* (pp. 4–15). Berlin/Heidelberg: Springer.

Rauchfleisch, A., Artho, X., Metag, J., Post, S., & Schäfer, M. S. (2017). How journalists verify user-generated content during terrorist crises. Analyzing Twitter communication during the Brussels attacks. *Social Media + Society*, *3*(3), 1–13.

Ross, J. I. (2007). Deconstructing the terrorism news media relationship. *Crime, Media, Culture*, *3*(2), 215–225.

Rothenberger, L. (2022). *Terrorismus as communication*. Wiesbaden: Springer VS.

Rothenberger, L., Müller, K., & Elmezeny, A. (2018). The discursive construction of terrorist group identity. *Terrorism and Political Violence*, *30*(3), 428–453.

Schaffert, R. W. (1992). *Media coverage and political terrorists. A quantitative analysis.* New York: Praeger.

Schmid, A. P. (1992). Editors' perspectives. In David L. Paletz & Alex P. Schmid (Eds.), *Terrorism and the Media* (pp. 111–136). Newbury Park: Sage Publications.
Schultz, T. (2017). Nichts ist sicher. Herausforderungen in der Berichterstattung über Terrorismus [Nothing is certain. Challenges in terrorism coverage]. In K. N. Renner, T. Schultz, J. Wilke & V. Wolff (Eds.), *Journalismus zwischen Autonomie und Nutzwert* [Journalism between autonomy and utility] (pp. 99–117). Köln: Herbert von Halem Verlag.
Shoshani, A., & Slone, M. (2008). The drama of media coverage of terrorism: Emotional and attitudinal impact on the audience. *Studies in Conflict & Terrorism*, *31*(7), 627–640.
Silke, A. (2004). *Research on terrorism. Trends, achievements and failures.* London: Frank Cass.
Simmons, B. K., & Lowry, D. N. (1990). Terrorists in the news, as reflected in three news magazines, 1980–1988. *Journalism Quarterly*, *67*(4), 692–696.
Steuter, E. (1990). Understanding the media/terrorism relationship: An analysis of ideology and the news in *time* magazine. *Political Communication*, *7*(4), 257–278.
Sui, M., Dunaway, J., Sobek, D., Abad, A., Goodman, L., & Saha, P. (2017). U.S. news coverage of global terrorist incidents. *Mass Communication and Society*, *20*(6), 895–908.
Surette, R., Hansen, K., & Noble, G. (2009). Measuring media oriented terrorism. *Journal of Criminal Justice*, *37*, 360–370.
Venger, O. (2019). The use of experts in journalistic accounts of media events: A comparative study of the 2005 London Bombings in British, American, and Russian newspapers. *Journalism*, *20*(10), 1343–1359.
Weimann, G., & Brosius, H.-B. (1991). The newsworthiness of international terrorism. *Communication Research*, *18*(3), 333–354.
Wilkinson, P. (1987). Terrorism: An international research agenda? Problems of definition and typology. In P. Wilkinson & A. M. Stewart (Eds.), *Contemporary Research on Terrorism* (pp. xi–xx). Aberdeen: Aberdeen University Press.
Winkler, C., El Damanhoury, K., Dicker, A., & Lemieux, A. F. (2019). Images of death and dying in ISIS media: A comparison of English and Arabic print publications. *Media, War & Conflict*, *12*(3), 248–262.
Wolf, K. (2010). Inszenierungstendenzen der Terrorismusberichterstattung im Fernsehen [Tendencies in staging terrorism coverage on TV]. In W. Frindte & N. Haußecker (Eds.), *Inszenierter Terrorismus: Mediale Konstruktionen und individuelle Interpretationen* [Staged terrorism: media constructions and individual interpretations] (pp. 232–254). Wiesbaden: VS Verlag für Sozialwissenschaften.
Zhang, X., & Hellmüller, L. (2016). Transnational media coverage of the ISIS threat: A global perspective? *International Journal of Communication*, *10*, 766–785.

Prof. Dr. Liane Rothenberger is a professor of media and the public with specialization in migration at the Catholic University of Eichstätt-Ingolstadt. She completed her Habilitation in 2018 with a book on terrorism as communication. Her research interests include journalism, crisis communication, international and intercultural communication, and migration research.

Valerie Hase is a Research Assistant at the Department of Media and Communication, LMU Munich. Her research focuses on crisis and conflict communication, terrorism and text as data/ computational social science.


BY



Die Inhaltsanalyse im Forschungsfeld der Justiz- und Kriminalitätsberichterstattung

Franziska Oehmer-Pedrazzi

1 Einleitung

Der Begriff Justiz bezeichnet „im weitesten Sinn die Einrichtungen der Rechtsprechung, ihre Träger und Organe sowie die damit verbundene Tätigkeit und Arbeitsweise, d. h. die Durchsetzung von rechtlichen Normen durch private und/oder hoheitliche Träger“ (Dölemeyer 2014, o. A.). Die allgemeine journalistische Beobachtung juristischer Akteure, Funktionen und Entscheide erfolgt im Rahmen der Justizberichterstattung. Dazu zählen bspw. Berichte über die Gesetzgebung, Grundrechte oder auch Datenschutz oder zur Legitimität der Rettungsfolter (Strippel 2016). Stehen ein spezifischer Gerichtsprozess und dessen beteiligte Akteure im Fokus der Berichterstattung, wird von Gerichtsberichterstattung gesprochen (vgl. Branahl 2005; Machill et al. 2007). Starke Überschneidungen bestehen dabei zur Kriminalitäts- oder Polizeiberichterstattung, auch wenn hier jedoch der Fokus vor allem auf das Tatgeschehen selbst und die polizeiliche Ermittlungsarbeit gelegt wird (Castendyk 1994; Eisenegger und Ettinger 2012). Rechtsfragen werden hier meist nur in einem allgemeinen Zusammenhang, vor allem in Erörterungen zur Schuldfrage, angesprochen. Erkenntnisse zur Darstellung der Arbeit des Gerichts, bestimmter Rechtsfragen im Zusammenhang mit Gerichtsprozessen und des Gerichtsentscheids werden damit in diesen Beiträgen eher nicht vermittelt.

Aus einer primär normativen Perspektive wird die Justiz- und Gerichtsberichterstattung mit drei Hauptfunktionen assoziiert: Erstens soll der Bevölkerung über

F. Oehmer-Pedrazzi (✉)
Fachhochschule Graubünden, Bern, Schweiz
E-Mail: franziska.oehmer@fhgr.ch

F. Oehmer-Pedrazzi et al. (Hrsg.), *Standardisierte Inhaltsanalyse in der Kommunikationswissenschaft – Standardized Content Analysis in Communication Research*, https://doi.org/10.1007/978-3-658-36179-2_13

die Medienberichterstattung Wissen über die Funktionsweise, Entscheidregeln und Prinzipien der Justiz transparent und nachvollziehbar gemacht werden. Dadurch können „vorherrschende Wertmaßstäbe aufgezeigt und das (Un)Rechtsbewusstsein des Bürgers geschult werden." (Remus 2012, S. 171) Zugleich wird darüber auch, zweitens, eine Kontrollfunktion ausgeübt (Eberle 1996): Durch mediale Berichterstattung soll richterlicher Willkür vorgebeugt (Gmür und Roth 2008) und ein durch die Öffentlichkeit kontrolliertes rechtsgleiches Verfahren gewährleistet werden (Trüg 2011). Damit ist die öffentliche Verhandlungsführung zugleich auch Prämisse für die Legitimation der Justiz (u. a. Hassemer 2009; Koppenhöfer 2012). Drittens ist mit der Veröffentlichung von richterlichen Entscheiden und den darin verhängten Strafen auch die Hoffnung verbunden, dass diese für nachfolgende TäterInnen eine abschreckende Wirkung im Sinne einer Generalprävention haben könne (vgl. Becker-Toussaint 2009; Branahl 2005).

2 Trends inhaltanalytischer Studien zur Justizberichterstattung

Sozialwissenschaftliche Studien, die empirische Evidenzen zur Justiz- und Gerichtsberichterstattung und ihrer Leistungen (im deutschsprachigen Raum) empirisch überprüfen, liegen bisher nur in sehr geringem Maße vor: Bisherige Publikationen beleuchten die Formen, Ziele und Merkmale der Justizberichterstattung aus einer theoretisch, konzeptionell-systematisierenden Perspektive (Branahl 2005; Brosius und Peter 2016; Oetzel 2016; Remus 2012). Die wenigen inhaltsanalytischen Beiträge fokussieren meist auf juristische Einzelfälle (Castendyk 1994; Köhler und Langen 2012; Siemens 2007; Strippel 2016; Verhovnik 2012) oder die Justizberichterstattung bestimmter Gerichte in einem regional begrenzten Raum (Chamberlain et al. 2019; Clark et al. 2015; Collins und Cooper 2015; Eberle 1996; Machill et al. 2007; Ostermeyer 1971; Strother 2017). Die Analysen beschränken sich zudem meist auf kurze Zeiträume (bspw. eine Woche: Chamberlain et al. 2019; zwei Monate: Ostermeyer 1971; ein halbes Jahr: Delitz 1989; ein Jahr: Vinson und Ertter 2002) und nur wenige oder gar nur ein Medium (Friske 1988; Ostermeyer 1971). Dabei handelt es sich meist um Printmedien (Collins und Cooper 2015; Delitz 1989; Hasebrink 2004; Machill et al. 2007; Strippel 2016; Verhovnik 2012).

Theoretisch knüpfen die Studien, die sich mit den journalistischen Selektionskriterien und damit der Repräsentativität der Justiz- und Gerichtsberichterstattung befassen, zumeist an die Nachrichtenwerttheorie (vgl. Galtung und Ruge 1965) an. Sie verweisen auf die Nachrichtenfaktoren Drama, lokale Nähe, Personalisierung und Negativismus, die in besonders starkem Ausmaß in der Justiz- und Gerichtsberichterstattung und auch Kriminalitätsberichterstattung vorzufinden sind (Brosius und Peters 2016; Chamberlain et al. 2019; Hestermann 2010; Machill et al. 2007; Eisenegger und Ettinger 2012; Strother 2017). Zudem verweisen Studien auch auf den Nachrichtenfaktor Überraschung als zentrales Selektionskriterium: Je überraschender ein juristischer Entscheid, desto wahrscheinlicher wird er medial aufgegriffen (Collins und Cooper 2015; Strother 2017;

Ura 2009). Auch Verweise auf Framing-Ansätze (bspw. Game Frame von Hitt und Searles 2018) finden Anwendung.

Methodisch werden inhaltsanalytische Studien meist verknüpft mit *Befragungen* von KommunikatorInnen – JournalistInnen resp. GerichtsreporterInnen und JuristInnen (bspw. Machill et al. 2007; Eberle 1996) – oder mit *Beobachtungen* von Medienkonferenzen und Gerichtsprozessen (Machill et al. 2007; Chamberlain et al. 2019). Zudem wird auch im Rahmen von *Experimenten* die Wirkung der Berichterstattung auf die Einstellung der Bevölkerung gegenüber der Justiz und deren Entscheiden (bspw. Hill und Searles 2018) getestet. Um die Selektionskriterien innerhalb der Justizberichterstattung nachvollziehen zu können, wird zudem häufig auch ein Vergleich mit extramedialen Daten wie bspw. Kriminalstatistiken (Eisenegger und Ettinger 2012) sowie Gerichtsdatenbanken (Strother 2017) durchgeführt.

3 Zentrale Konstrukte inhaltanalytischer Studien zur Justizberichterstattung

Inhaltsanalytische Studien zur Justiz- und Gerichtsberichterstattung fokussieren auf das a) vermittelte juristische Wissen in Nachrichtenmedien, b) die Repräsentativität und Merkmale der berichteten Gerichtsprozesse und c) die Darstellung der involvierten Akteure. Nachfolgend werden die zentralen Befunde hierzu unter Berücksichtigung der wesentlichen Konstrukte/Variablen dargestellt:

3.1 Wissen über Justiz & Stil der Berichterstattung

Welches Wissen über das Funktionieren der Justiz, die rechtlichen Grundlagen und den Verlauf eines Prozesses durch JournalistInnen vermittelt und wie die Medien damit der normativen Öffentlichkeitsfunktion gerecht werden – so bspw. durch das Kommentieren von Urteilsbegründungen oder rechtlicher Grundsätze oder durch die Vermittlung von Hintergrundwissen – ist Gegenstand zahlreicher, meist jedoch nicht standardisierter Inhaltsanalysen (Castendyk 1994; Eberle 1996; Friske 1988). Castendyk (1994) folgert aus seiner nicht repräsentativen Einzelfallanalyse, dass mit einer Ausnahme sämtliche berücksichtigte Justizfälle in der Berichterstattung sachlich erklärt und wesentliche Elemente des Tatbestands berücksichtigt und nicht verkürzt oder missverständlich dargestellt worden seien. Dabei erweisen sich vor allem Wochenzeitungen aufgrund der meist umfassenderen Recherchezeit als informationsreicher (ebenda, S. 292). Die Mehrzahl der Studien attestiert der Justiz- und Gerichtsberichterstattung allerdings einen Mangel an relevanten Informationen für das Verständnis der Justiz und des Gerichtsprozesses: So resümiert bspw. Eberle (1996, S. 304) auf der Basis seiner inhaltsanalytischen Daten zur Berichterstattung über das Verwaltungsgericht, dass der Leser «über die Funktionsweise der Verwaltungsgerichte und das

Zustandekommen ihrer Entscheidungen wenig» erfährt. Verhovnik (2012) folgert aus der Inhaltsanalyse der Berichterstattung zu einem Kriminalfall, dass die JournalistInnen nur unzureichende Informationen vermitteln. Vinson und Ertter (2002) erhoben im Rahmen einer quantitativen Inhaltsanalyse, inwiefern die Justizberichterstattung faktenorientiert (Informationen über das Wer? Was? und Wann?), hintergründig (Erklärungen über die Gesetzeslage, Möglichkeiten des Strafmaßes, …) oder unterhaltend (Fokus auf Emotionen, Visualisierung, …) war: Nur 6 % der analysierten Medienberichte boten ihren Erkenntnissen zufolge mehrheitlich Hintergrundinformationen. Drei Viertel der Berichte waren faktenbasiert. 20 % waren überwiegend unterhaltend. Auch Ostermeyer (1971) konnte lediglich in sechs von 38 identifizierten Gerichtsreportagen Hintergrundinformationen und Ursachenbeschreibungen ausmachen.

Wer juristisches Wissen einbringen und bewerten kann, wird mithilfe der Variable **Akteure** (oder auch UrheberInnen oder SprecherInnen), die in der Berichterstattung direkt oder indirekt zu Wort kommen, erhoben. Dominierende Akteure, neben den JournalistInnen selbst, sind innerhalb der Justiz- und Gerichtsberichterstattung aufgrund des hierfür notwendigen Fachwissens und -vokabulars häufig JuristInnen (Strippel 2016) oder ExpertInnen (Verhovnik 2012).

3.2 Merkmale der berichteten Gerichtsprozesse.

Neben den allgemein über die Justiz vermittelten Informationen interessieren sich inhaltsanalytische Studien auch für die Spezifika eines Gerichtsfalls wie bspw. das Rechtsgebiet oder das Verfahrensstadium:

Rechtsgebiete der berichteten Justizfälle: Die Forschung zur Justiz- und Gerichtsberichterstattung widmete sich auch dem häufig in der Öffentlichkeit diskutierten Vorwurf der zu Gunsten von Straftaten und Gewaltverbrechen verzerrten Justizberichterstattung. Ein Großteil der Studien konnte eine Überrepräsentativität der Strafprozesse zeigen (Delitz 1986, 1989; Eberle 1996; Friske 1988; Hasebrink 1994; Machill et al. 2007; Ostermeyer 1971). Informationen über Verfahren, Akteure und Entscheide der Verwaltungs-, Zivil- oder auch Arbeitsgerichte standen entsprechend nur selten im Fokus des journalistischen Interesses, obwohl diese häufig über den Einzelfall hinausweisende gesellschaftliche Relevanz aufweisen (Eberle 1996, S. 300; Vinson und Ertter 2002). Innerhalb des Strafrechts- und der Kriminalitätsberichterstattung dominierten zudem Gewaltverbrechen gegen Leib und Leben (Eisenegger und Ettinger 2012; Hestermann 2010; Ionescu 1996; Klite et al. 1997; Ostermeyer 1971; Vinson und Ertter 2002). Lediglich Delitz hat in einer Inhaltsanalyse der Printmedienberichterstattung aus dem Jahr 1983 v. a. Eigentumsdelikte und Delikte gegen die öffentliche Ordnung im Vordergrund der journalistischen Aufmerksamkeit ausgemacht. Tötungsdelikte werden, seiner Inhaltsanalyse zu Folge, am dritthäufigsten thematisiert.

Analysen zur Gerichtsberichterstattung erfassen zudem auch die Bewertungen des Entscheids oder des Gerichts, die – im Vergleich zu anderen politischen Akteuren – meist

neutral oder positiv ausfallen (Hasebrink 2004; Eberle 1996). Die Arbeit der Justiz erfährt damit in der Medienberichterstattung tendenziell Unterstützung. Eberle (1996) begründet dies mit der häufigen Übernahme von Pressemitteilungen von Gerichten, die eigene Entscheide nicht in einem negativen Licht darstellen. Die Presse, so resümiert Ostermeyer (1971, S. 95) in seiner Analyse der Gerichtsreportagen, «unterwirft sich kritiklos dem Urteilsspruch und ist bestrebt, alle Zweifel an der Beweisführung zu zerstreuen».

Von Interesse war zudem auch das Stadium und damit ein eher formales Merkmal eines berichteten Prozesses. Dabei wurde erfasst, ob es sich um die **Phase** vor, während oder nach dem Gerichtsprozess handelt (vgl. Haney und Greene 2004; Glark 2015; Strother 2017). Der mediale Fokus lag dabei vor allem auf dem Beginn, in dem die neuen Informationen über den Fall eingeführt werden, und dem Ende respektive dem Entscheid und die möglichen emotionalen Reaktionen darauf, während die Hauptverhandlung meist nicht oder wenig verfolgt wurde (Vinson und Ertter 2002; Haney und Greene 2004).

3.3 Darstellung der Prozessbeteiligten

An einem Prozess sind in der Regel der richterliche Spruchkörper, bestehend aus einem oder mehreren RichterInnen oder SchöffInnen, die unmittelbaren Prozessparteien (Begklagte*r, KlägerIn) und deren jeweiliger rechtlicher Beistand (Anwalt/Anwältin und Staatsanwalt/Staatsanwältin) beteiligt. Daneben können andere ZeugInnen, GutachterInnen oder auch PolizistInnen eine Rolle spielen.

Im Rahmen von inhaltsanalytischen Studien wird mit Blick auf die beteiligten Akteure häufig erhoben, inwiefern sich die Prozessbeteiligten (v. a. die Angeklagten) durch eine **identifizierende Berichterstattung** bspw. durch volle Namensnennung, eine detaillierte Beschreibung der Person, ihrer Lebensumstände und Fotos, erkennen lassen. Damit wird analysiert, welches Ergebnis der Abwägungsprozess von JournalistInnen zwischen Persönlichkeitsrecht der Beteiligten und dem öffentlichen Interesse zeitigt. Verhovnik (2012) konnte in einer Fallstudie deutlich machen, dass die Berichterstattung überwiegend deutliche Rückschlüsse auf die Person zulässt. Delitz (1989) weist zudem darauf hin, dass vor allem Prominente resp. Personen des Zeitgeschehens mit einem erhöhten journalistischen Interesse rechnen müssen.

Der **Nationalität** der Angeklagten oder vermeintlichen TäterInnen sowie der (mutmaßlichen) Opfer galt ebenfalls das Interesse einiger Studien (Eisenegger und Ettinger 2012; Vinson und Ertter 2002). Die Forschung konnte dabei zeigen, dass die Nationalitäten nicht überall und zu jedem Zeitpunkt in gleichem Maße berichtet werden: Vinsson und Ertter (2002) konnten für die Medienberichterstattung in den USA bspw. feststellen, dass Minoritäten überwiegend in der Täter-, aber vergleichsweise selten in der Opferrolle portraitiert werden. Zu einem ähnlichen Befund kommt Hestermann (2010, 2012) für deutsche Fernsehnachrichten: Verglichen mit der Kriminalitätsstatistik

werden überproportional häufiger ausländische TäterInnen, aber unterproportional seltener ausländische Opfer dargestellt. Zudem lässt sich im Zeitvergleich kein Trend in der Nationalitätennennung abzeichnen: Stattdessen scheinen politische und gesellschaftliche Stimmungen die Wahrscheinlichkeit der Berücksichtigung der Nationalität in der Berichterstattung zu beeinflussen (bspw. Arendt et al. 2017; Eisenegger und Ettinger 2012).

Die Angeklagten werden in der Berichterstattung zudem auch überwiegend stark wertend negativ und **vorverurteilend** dargestellt (Haney und Greene 2004; Ostermeyer 1971). Informationen, die die/den mutmaßliche/n TäterIn entlasten oder in einem weniger negativen Licht darstellen könnten, wie bspw. Verweise auf Nachteile, die aus der Biographie, der gesundheitlichen Konstitution oder sozioökonomischen Faktoren der/des Angeklagten resultieren könnten, finden sich nur selten (Bakhshays und Haney 2018; Haney und Greene, 2004).

4 Forschungsdesiderata

Als Fazit zum inhaltsanalytischen Forschungsstand über die Justiz- und Gerichtsberichterstattung lässt sich insgesamt ein Desiderat für Untersuchungen v. a. für den deutschsprachigen Raum feststellen, die aktuell, repräsentativ, und nicht-fallbezogen sind sowie verschiedene Medienformate (Print, TV, Online) berücksichtigen (vgl. Tab. 1).

Tab. 1 Zusammenfassung: Inhaltsanalysen zur Justiz- und Gerichtsberichterstattung (eigene Darstellung)

Zentrale Fragestellungen	Fragen zur Repräsentativität: Welche Rechtsgebiete bzw. welche Gerichtsprozesse werden berichtet? Wir wird der Prozess/das Gericht dargestellt? Wie werden die Prozessbeteiligten dargestellt?
Theoretische Perspektiven	Nachrichtenwerttheorie
Methoden & Methodenkombinationen	Standardisierte und nicht standardisierte Inhaltsanalysen in Kombination mit Befragungen von JustizpraktikerInnen und Beobachtungen von Prozessen; Berücksichtigung von extramedialen Daten (Kriminalstatistiken, Gerichtsdatenbanken)
Hauptbefunde	Ungenügende Vermittlung von relevanten Hintergrundinformationen; Strafrechtsprozesse und Gewaltdelikte dominieren; Prozessakteure werden identifizierend berichtet; Angeklagte werden vorverurteilt
Forschungsdesiderata	Repräsentative, nicht-fallbezogene standardisierte und vergleichende Inhaltsanalysen von TV- und Onlineberichterstattung

Gerade die starke Fokussierung bisheriger Forschung auf Printmedien wird den schon seit geraumer Zeit geänderten Mediennutzungsgewohnheiten nicht mehr gerecht. Erkenntnisse über Möglichkeiten und Grenzen medienspezifischer Darstellungen (bspw. Visualisierungsmöglichkeiten von Gerichtsprozessen bei Kameraverbot im Gerichtssaal, Boulevardisierung, Verlinkungen zu anderen vorhergehenden Gerichtsprozessen oder extramedialen Daten, …) liegen daher ebenfalls nicht vor. Zudem ist ein Bedarf an Längsschnittstudien auszumachen, die Entwicklungen der journalistischen Beobachtung der Justiz und der Gerichte im Zeitverlauf erkennbar und erklärbar machen. Um die Spezifika des meist national verankerten Rechtssystems und dessen möglichen Niederschlag in der Berichterstattung erkennen zu können, wären international vergleichende Studien wünschenswert. So wäre es bspw. interessant festzustellen, ob die Beteiligung von LaienrichterInnen (Jury) einen Einfluss auf die Bewertung der Justizentscheide durch JournalistInnen hat und ob die Gerichtsentscheide in Common Law Rechtssystemen (bspw. in den USA) aufgrund ihres häufig präjudiziellen Charakters auch einen höheren Stellenwert innerhalb der Berichterstattung einnehmen als Entscheide in Civil Law-Systemen (bspw. in Deutschland und der Schweiz).

Welches Bild von der Justiz und damit von einem relevanten politischen und gesellschaftlichen Akteur in den Medien gezeichnet wird, ist daher nach wie vor weitgehend unklar. Insbesondere fehlen empirische Evidenzen auf der Basis *standardisierter und über den Einzelfall hinausgehender* Inhaltsanalysen zu folgenden Fragestellungen:

- Welches Wissen über die Justiz (Prozesse, Akteure, Entscheide) wird in den Medien vermittelt? Werden Fachtermini (Mord, Totschlag, Revision, …) und Hintergründe erklärt und politische und gesellschaftliche Implikationen einzelner juristischer Entscheide vermittelt?
- Wie erfolgt die Darstellung der Prozessakteure – personalisiert, skandalisiert, emotionalisiert? Denn die Darstellung der Prozessakteure in Bezug auf eine mögliche Vorverurteilung sowie der Grad der Personalisierung standen kaum im Fokus des Erkenntnisinteresses der inhaltsanalytischen Studien.

Ungenutzt für die Analyse der Justiz- und Gerichtsberichterstattung ist bisher auch das Potenzial automatisierter Inhaltsanalysen bzw. die Kombination aus automatisierter und manueller Textanalyse, um umfassende Untersuchungskorpora reliabel erfassen zu können. Eine Ausnahme stellt eine Analyse von Hitt und Searles (2018) dar, die im Rahmen einer wörterbuchbasierten automatisierten Inhaltsanalyse Indikatoren für die Anwendung des Game-Frames in der Berichterstattung identifizierten.

Relevante Variablen in DOCA – Database of Variables for Content Analysis

Sources & actors: https://doi.org/10.34778/2zq
Legal area: https://doi.org/10.34778/2zo
Phase of the trial: https://doi.org/10.34778/2zp
Identifying news coverage: https://doi.org/10.34778/2zr
Prejudgment of the accused: https://doi.org/10.34778/2zs
Nationality: https://doi.org/10.34778/2zt

Literatur

Arendt, F., Brosius, H. & Hauck, P. (2017). Die Auswirkung des Schlüsselereignisses „Silvesternacht in Köln" auf die Kriminalitätsberichterstattung. *Publizistik, 62*, S. 135–152.

Becker-Toussaint, H. (2009). Die Bedeutung der Medien für die Staatsanwaltschaft. In I. Rode & M. Leipert (Hrsg.), *Das moderne Strafrecht in der Mediengesellschaft.* (S. 43-58). Berlin-Münster-Wien-Zürich-London: LIT Verlag.

Branahl, U. (2005) *Justizberichterstattung. Eine Einführung*. Wiesbaden: VS Verlag für Sozialwissenschaften.

Brosius, H.-B. & Peters C. (2016). Die Berichterstattung der Medien über Kriminalität und Justiz und ihre Wirkung auf die Öffentlichkeit. In U. Murmann (Ed.). Strafrecht und Medien (S. 37–49). Göttingen: Universitätsverlag Göttingen

Castendyk, O. (1994). *Rechtliche Begründungen in der Öffentlichkeit. Ein Beitrag zur Rechtskommunikation in Massenmedien.* Wiesbaden: Springer Fachmedien.

Chamberlain, P., Keppel-Palmer, M., Reardon, S., & Smith, T. (2019). It is criminal: The state of magistrates' court reporting in England and Wales. *Journalism*.

Collins, T.A. & Cooper C.A. (2015). Making the cases "real": newspaper coverage of U.S. Supreme Court cases 1953–2004, *Political Communication, 32*(1), S. 23–42.

Clark, T. S., Lax, J. R., & Rice, D. (2015). Measuring the political salience of Supreme Court cases. *Journal of Law and Courts, 3*(1), 37–65.

Delitz, J. (1986). Gerichtsberichterstattung als Vermittlung institutioneller Wirklichkeit: Beiträge der Sektions- und Ad-hoc-Gruppen. In J. Friedrichs (Hrsg.). *Deutsche Gesellschaft für Soziologie. 23. Deutscher Soziologentag 1986*. Opladen: Westdeutscher Verlag.

Delitz, J. (1989). *Tagespresse und Justiz. Gerichtsberichterstattung als Vermittlung institutioneller Wirklichkeit*. Hamburg.

Dölemeyer, B. (o.A.) Justiz. In F. Jaeger (Hrsg). *Enzyklopädie der Neuzeit Online*, J.B. Metzlersche Verlagsbuchhandlung und Carl Ernst Poeschel Verlag GmbH 2005–2012. https://doi.org/10.1163/2352-0248_edn_a1978000.

Eberle, R. G. (1996). Verwaltungsgerichte in der Medienberichterstattung am Beispiel von Tageszeitungen in Hessen. *Zeitschrift für Rechtssoziologie, 17*(2), S. 300–309.

Eisenegger, M. & Ettinger, P. (2012). *Kriminalitätsberichterstattung in der Schweizer Presse*. Zürich: Schwabe Verlag.

Friske, H.-J. (1988). *Justiz und Medien*. Münster.

Galtung, J. & Ruge, M.H. (1965). The structure of foreign news. *Journal of Peace Research, 1*, S. 64–91.

Gmür R. & Roth, A. (2014): *Grundriss der deutschen Rechtsgeschichte*, 11. Aufl. (2008), Vahlen: München.

Haney, C. & Greene, S. (2004). Capital constructions: Newspaper reporting in death penalty cases. *Analyses of Social Issues and Public Policy, 4*(1), 129–150.

Hassemer, W. (2009). Medien im Bundesverfassungsgericht. In I. Rode & M. Leipert (Hrsg.), *Das moderne Strafrecht in der Mediengesellschaft.* (S. 13–26). Berlin-Münster-Wien-Zürich-London: LIT Verlag.

Hestermann, T. (2010). *Fernsehgewalt und die Einschaltquote: Welches Publikumsbild Fernsehschaffende leitet, wenn sie über Gewaltkriminalität berichten*, Baden-Baden: Nomos.

Hestermann, T. (2012): Mitleid für das Opfer, Starruhm für den Täter. In Derss. (Hrsg.). *Von Lichtgestalten und Dunkelmännern. Wie die Medien über Gewalt berichten* (S. 27–42), Springer VS.

Hitt, M. P. & Searles, K. (2018). Media coverage and public approval of the U.S. Supreme Court, *Political Communication*, *35*(4), 566–586.

Ionescu, A. (1996). *Kriminalberichterstattung in der Tagespresse. Eine empirische Untersuchung der Tageszeitung Bild, Nürnberger Nachrichten und Süddeutsche Zeitung im Zeitraum Januar und Juni 1989*. Dissertation, Universität Erlangen.

Klite, P., Bardwell, R.A. & Salzman, J. (1997). Local TV news: Getting away with murder. *Harvard International Journal of Press/Politics, 2*, S. 102–112

Köhler, A. & Langen, P. (2012). Der Fall Kachelmann zwischen öffentlicher und veröffentlichter Meinung: In dubio contra reo? In L. Rademacher & A. Schmitt-Geiger (Hrsg.): *Litigation-PR: Alles was Recht ist* (S. 187–202). Springer VS.

Koppenhöfer, B. (2012). Was darf die Justiz? Was macht die Justiz? Welchen Einfluss haben die Medien? Ein Bericht aus der Praxis. In L. Rademacher & A. Schmitt-Geiger (Hrsg.): *Litigation-PR: Alles was Recht ist* (S. 279–292). Springer VS.

Machill, M., Beiler, M. & Hellmann, I. (2007). The selection process in local court reporting *Journalism Practice*, *1*(1), S. 62–81.

Oetzel, A.-K. (2016). Die Berichterstattung über Straftaten und Prozesse im Fernsehen. In H. Brettel, M. Rau & J. Rienhoff (Hrsg.). *Strafrecht in Film und Fernsehen*. (S. 35–66), Wiesbaden: Springer Fachmedien.

Ostermeyer, H. (1971). Straflust statt Rechtsbewusstsein. Die Gerichtsreportage als repressives Ritual. In E. Spoo (Hrsg.). *Die Tabus der bundesdeutschen Presse*, (S. 82–86), München.

Remus, N. (2012). Justizberichterstattung als öffentliche Aufgabe. In L. Rademacher & A. Schmitt-Geiger (Hrsg.): *Litigation-PR: Alles was Recht ist* (S. 169–186). Springer VS.

Siemens, D. (2007). *Metropole und Verbrechen. Die Gerichtsreportage in Berlin, Paris und Chicago 1919–1933.* Stuttgart: Franz Steiner Verlag.

Strother, L. (2017). How expected political and legal impact drive media coverage of Supreme Court cases, *Political Communication, 34*(4), S. 571-589.

Strippel, C. (2016).„Rettungsfolter" in der Diskussion: Ein Vergleich der öffentlichen und juristischen Kommunikation über Rechtsfragen. In. P.Werner, L. Rinsdorf, T. Pleil & K.-D. Altmeppen (Hrsg.). *Verantwortung – Gerechtigkeit – Öffentlichkeit. Normative Perspektiven auf Kommunikation* (S. 109–123). Konstanz: UVK.

Trüg G. (2011). Medienarbeit der Strafjustiz – Möglichkeiten und Grenzen. *Neue Juristische Wochenschrift*, S. 1040–1045.

Ura, J. D. (2009). The Supreme Court and issue attention: The case of homosexuality. *Political Communication, 26*, S. 430–446.

Verhovnik, M. (2012). Gerichtsberichterstattung und die Verantwortung der Medien. Der Fall Rudolf R.. *Communicatio Socialis, 45*(3), S. 292–305.

Vinson, C. D., & Ertter, J. S. (2002). Entertainment or Education: How Do Media Cover the Courts? *Harvard International Journal of Press/Politics, 7*(4), S. 80–97.

Dr. Franziska Oehmer-Pedrazzi is a senior lecturer and researcher at the University of Applied Sciences of the Grisons. She holds a PhD in Communication Science from the University of Zurich and a Bachelor in Law. Her research interests include mediatization (of law), political communication and digital media governance.





Content Analysis in the Research Field of Economic News Coverage

Janine Greyer-Stock

1 Introduction

Economics have become an integral part of the private and public sphere and are also gaining political importance (Beck et al. 2012; Hester and Gibson 2003; Mast et al. 2017). Whether financial and economic crises, corporate insolvencies, or the general job market—economic issues are not only highly relevant on a societal level, but also matter to individuals on a personal level, as for example seen with employees or consumers. Furthermore, events that are not primarily economic in nature can have a strong impact on the economy, the Covid-19 pandemic being a prime example. Thus, economic issues and their respective communication remain of critical importance not only in times of crisis.

In light of its wide-ranging audience, information quality, and credibility, journalism can be considered the most important actor within public economic communications (Mast and Spachmann 2014; Mast et al. 2017). Economics and business news are not only classic, but also fundamental columns of media coverage. This is in addition to topics on economics that are also represented in other sections as so-called cross-sectional topics (Beck et al. 2012; Heinrich and Moss 2006; Mast 2012; Mast and Spachmann 2005). Lastly, journalists interpret events from other areas (e.g. politics,

J. Greyer-Stock (✉)
Institut für Publizistik- und Kommunikationswissenschaft, Freie Universität Berlin, Berlin, Deutschland
E-Mail: janine.greyer@fu-berlin.de

F. Oehmer-Pedrazzi et al. (Hrsg.), *Standardisierte Inhaltsanalyse in der Kommunikationswissenschaft – Standardized Content Analysis in Communication Research*, https://doi.org/10.1007/978-3-658-36179-2_14

sports) with an economic focus through emphasis of their economic aspects (Mast and Spachmann 2014).

Economics has therefore always been heterogeneous and diverse in nature, making it a challenging task to define the subject of "economic news coverage". Economic journalism mainly contains economics, business, and finance (Arrese and Vara 2015). Traditionally, these include reporting on markets and industries, companies, business cycles, finance and stock markets, products and consumers (as well as economic policy in a broad definition) (Brandstetter and Range 2017; Mast 2012). Depending on the subject of investigation, other topics such as economic crime, taxes, or careers may also be included (Beck et al. 2012). It is at this point that the great thematic variety and subject breadth and depth of economic news becomes apparent.

2 Frequent Research Designs and Combination of Methods

The different types of economics can be found in the most diverse shapes and forms of media. There is no such thing as just one form of economic journalism, but a wide range of publication types and formats (Mast and Spachmann 2005). Considering the diversity of the field and thus the heterogeneity of existing research, a selection of the most recent literature using standardized content analyses will be reviewed and discussed.

The underlying research field is methodologically mainly characterized by standardized manual content analyses (e.g. Alsem et al. 2008; Arrese and Vara 2015; Cinalli and Giugni 2018; Denner et al. 2020; Dogruel et al. 2013; Kleinnijenhuis et al. 2015; Lischka 2014; Lohs 2020) with only a few automated content analyses/procedures (e.g. Damstra and Boukes 2018; van Dalen et al. 2017).

Some authors combine different methods such as qualitative surveys of experts or journalists and standardized content analyses (e.g. Arlt and Storz 2010; Beck et al. 2012; Berghofer et al. 2014). There are also some surveys of recipients combined with standardized content analyses (e.g. Boomgaarden et al. 2011; Brettschneider 2000; Quiring 2003; Hester and Gibson 2003; Svensson et al. 2017a). The combination of qualitative and standardized content analyses is less common (e.g. Bach et al. 2012, 2013; Damstra and Vliegenthart 2018; Knowles et al. 2017).

Thematic Focus

A primary focus in this area of research includes studies focusing on general economic news coverage (e.g. Alsem et al. 2008; Beck et al. 2012; Damstra and Boukes 2018; Hester and Gibson 2003; Kleinnijenhuis et al. 2015; Lischka 2014). More frequently, however, is the examination of different sub-categories of economic news coverage often focusing on financial and economic crises (e.g. Arrese and Vara 2015; Bach et al. 2012, 2013; Boomgaarden et al. 2011; Brettschneider 2000; Cinalli and Giugni 2018; Damstra and Vliegenthart 2018; Doudaki et al. 2019; Knowles et al. 2017). Studies on business or corporate news are less frequent (e.g. Brettschneider and Vollbracht 2010; Denner

et al. 2020; Merrill 2019; Shaw 2016), the same applies to topics such as unemployment (Quiring 2003) or economic policy/financial market policy (e.g. Arlt and Storz 2010; Merrill 2019). Some studies also conduct exemplary analyses on specific economic topics, instead of examining explicitly economy-oriented issues (e.g. Alsem et al. 2008; Berghofer et al. 2014; Brettschneider 2000; Dogruel et al. 2013; Kostadinova and Dimitrova 2012).

Media Samples

Whilst numerous content analyses focus on print media only (e.g. Arrese and Vara 2015; Bach et al. 2012; Beck et al. 2012; Boomgaarden et al. 2011; Cinalli and Giugni 2018; Damstra and Boukes 2018; Kleinnijenhuis et al. 2015; Knowles et al. 2017; Mercille 2014), TV and radio are less well analyzed: there are combinations of TV and print news (e.g. Arlt and Storz 2010; Boomgaarden et al. 2011; Brettschneider 2000; Hester and Gibson 2003; Lischka 2014), TV and radio news (Sommer et al. 2010) as well as TV exclusively (Quiring 2003). Some content analyses of economic news coverage compare different media genres, for example print vs. online media (Beck et al. 2012), quality and popular press/tabloids, business press/financial outlets (e.g. Arrese and Vara 2015; Beck et al. 2012; Boomgaarden et al. 2011; Damstra and Boukes, 2018; Damstra and Vliegenthart 2018) or political inclination of newspapers (left–right) (Kleinnijenhuis et al. 2015).

Countries

The content analyses on economic news coverage and its sub-categories were conducted in reference to numerous countries, such as Bulgaria (Kostadinova and Dimitrova 2012), Denmark (Svensson et al. 2017a; van Dalen et al. 2017), Germany (Arlt and Storz 2010; Bach et al. 2012, 2013; Beck et al. 2012; Berghofer et al. 2014; Dogruel et al. 2013; Lischka 2014; Quiring 2003), Great Britain (Merrill 2019), Greece (Doudaki et al. 2019), Ireland (Mercille 2014), Japan (Wu et al. 2004), the Netherlands (Alsem et al. 2008; Boomgaarden et al. 2011; Damstra and Vliegenthart 2018), Switzerland (Sommer et al. 2010), USA (Hester and Gibson 2003; Wu 2002). In addition, there are country-specific content analyses focusing on particular aspects, such as the comparison of Germany’s old and new states (Brettschneider 2000) or Switzerland’s different language regions (Sommer et al. 2010).

Comparative analyses between countries are less frequent (e.g. Arrese and Vara 2015; Cinalli and Giugni 2018; Kleinnijenhuis et al. 2015; Knowles et al. 2017) and mostly focus on print media: The study by Cinalli and Giugni (2018) is particularly extensive. The authors examine the economic crisis (started in 2008) and conduct a claims analysis of articles in five daily newspapers in nine European countries (France, Germany, Greece, Italy, Poland, Spain, Sweden, Switzerland) between 2005 and 2014 (Cinalli and Giugni 2018). Other studies compare economic journalism in Germany, the United States of America, and the United Kingdom between 2007 and 2012 (Kleinnijenhuis et al. 2015) or focus on three English-speaking countries (the United States of America,

the United Kingdom, and Australia) over three decades (1990s, 2000, 2007–2008) (Knowles et al. 2017).

Analyses Over Time

Data on economic news over time is mainly available for individual countries: e.g. Bulgaria from 1990 to 2009 (Kostadinova and Dimitrova 2012), Denmark from 1996 to 2012 (van Dalen et al. 2017), Germany from 1994 to 1998 (Quiring 2003) and from 2002 to 2010 (Lischka 2014), Ireland from 1995 to 2011 (Mercille 2014), the Netherlands from 1998 to 2003 (Alsem et al. 2008), from 2002 to 2015 (Damstra and Boukes 2018) and from 2007 to 2013 (Damstra and Vliegenthart 2018) and the USA from 1987 to 1996 (Wu 2002) and from 1998 to 2002 (Hester and Gibson 2003). Analyses that integrate both, a transnational and a chronological perspective, are less frequent (Cinalli and Giugni 2018; Kleinnijenhuis et al. 2015; Knowles et al. 2017).

3 Constructs and Main Results

The research questions examined in the studies with content analyses of economic news coverage and its sub-areas refer theoretically to four different aspects: *1) the quality of news coverage* in a broader sense (e.g. Arlt and Storz 2010; Arrese and Vara 2015; Beck et al. 2012; Dogruel et al. 2013; Knowles et al. 2017; Lischka 2014). In addition, numerous studies examine economic news coverage in relation to *2) framing* (e.g. Bach et al. 2012, 2013; Damstra and Vliegenthart 2018; Doudaki et al. 2019; Kleinnijenhuis et al. 2015; Kostadinova and Dimitrova 2012), and, but less frequently, 'claim making' (Cinalli & Giugni, 2018). Combined methods with standardized content analyses and surveys of recipients often examine *3) media effects*—the overall impact that news coverage may have on viewers perception (e.g. Alsem et al. 2008; Boomgaarden et al. 2011; Brettschneider 2000; Damstra and Boukes 2018; Quiring 2003; Svensson et al. 2017b; Van Dalen et al. 2016). On rare occasions Agenda-setting effects are also considered (Hester and Gibson 2003). The last aspect considers *4) relationships with the real economy:* Some authors examine to what extent economic developments are related to media coverage (e.g. Brettschneider 2000; Damstra and Boukes 2018; Hester and Gibson 2003; Quiring 2003; Van Dalen et al. 2016). The main constructs and results in relation to economic news coverage in general or in the context of economic and financial crises can be summarized as follows:

1. *Quality:* the keyword 'quality' (in a broad sense) encompasses a range of constructs and study results that refer to a) the proportion and general characteristics of economic news coverage, b) its diversity and c) tabloidization.
   a) Proportion and general characteristics: The presentation of economic issues is primarily depending on the specific issue, the medium and the audience (Spachmann 2005). For economic news coverage in general, study results from

Germany show that the proportion of business reporting in tabloids is less than half as large as compared to quality press (Beck et al. 2012). Moreover, consumer reports are gaining importance with an increased emphasis on user-value (value of benefit for the recipients) (e.g. Beck et al. 2012; Brandstetter and Range 2017; Mast 2003).

b) Diversity: Economic news coverage tends to be uniform, especially for the economic and financial crisis coverage. This means homogeneous news coverage with little diversity in topics, little room for alternative perspectives and actors as well as lack of diversity of information sources. This can be seen in relation to different countries, media types, genres and also over time (e.g. Beck et al. 2012; Damstra and Vliegenthart 2018; Knowles et al. 2017).

c) Tabloidization: While only a few studies address tabloidization in general (Beck et al. 2012; Dogruel et al. 2013), the aspect of negativity/negativism is examined far more frequently. The results show that journalists overemphasize negative stories, while positive developments are often neglected. Negativity biases and mediated uncertainty have been found in newspaper reporting on a number of economic issues and are also documented for individual topics on television (e.g. Brettschneider 2000; Damstra and Boukes 2018; Hester and Gibson 2003; Quiring 2003; Van Dalen et al. 2016). In addition to negativity, the tabloid characteristics scandalization, speculation, and emotionalization are emphasized in the economic news coverage in Germany, both in tabloid and quality press (Beck et al. 2012). It is also being criticized that studies on the economic and financial crisis are being presented as too simplistic, uncritical or alarming (Arrese and Vara 2015).

2. *Framing:* In the operationalization of frames in the analysis of economic news, the inductive approach dominates. In this approach, frame elements (Entman 1993, 2003; Benford and Snow 2000) are identified in the media content and frequently occurring combinations of these elements result in frames (e.g. Bach et al. 2012, 2013; Damstra and Vliegenthart 2018; Kleinnijenhuis et al. 2015; Quiring et al. 2013). Bach et al. (2012, 2013) choose a multilevel operationalization by first qualitatively condensing different frame elements into frames based on a small media sample and then examining them quantitatively in the whole news sample. A deductive approach of pre-determined holistic frames, by contrast, rarely occurs in the field of economic media coverage.

   In line with the results regarding negativity in economic news, negative rather than positive frames and only a few critical positions are evident (e.g. Damstra and Vliegenthart 2018; Hester and Gibson 2003). Other studies demonstrate that the “communicative complexity” of media coverage (understood as the variety of actors and issues (agenda complexity) and the association between them (frame complexity)), is dependent on the different phases of crisis news coverage (Kleinnijenhuis et al. 2015). Quiring et al. (2013), as well as Bach et al. (2012, 2013), show for the news coverage during the financial crisis that single frames clearly dominate, but that within the news coverage the dominance of different frames varies

strongly over time. In addition, some frames are found to complement each other, while others tend to compete.

3. *Media effects:* Studies that combine content analyses with surveys of recipients show that the specific presentation of economic news coverage impacts the opinion, attitude, and behavior of recipients. In content analyses the constructs ambiguity and negativity are often measured: Ambiguity in media coverage, negativity and mediated uncertainty lead to pessimism and negatively influence changes in consumer confidence. This not only impacts consumer behavior, but also economic conditions. The results are particularly evident for the economic and financial crisis in print media and television as well as for various countries and over time (e.g. Alsem et al. 2008; Boomgaarden et al. 2011; Brettschneider 2000; Damstra and Boukes 2018; Svensson et al. 2017b; Van Dalen et al. 2016). Scheufele et al. (2011) content-analyzed the valence of financial news; however, in their study of the media effect on stock prices, they did not find any media effects but, on the contrary, rather evidence that media reflect real stock developments.
4. *Relationships with the real economy:* Some studies show a relationship between real economic factors and media coverage. For this purpose, statistics and "real-world" economic indicators are compared with the media coverage. Measured constructs in the media content are, for example, economic changes (positive/negative) or volume and tone of coverage (positive/negative) (e.g. Brettschneider 2000; Damstra and Boukes 2018; Hester and Gibson 2003; Quiring 2003; Van Dalen et al. 2016). Results show that media pay more attention to negative economic events and present them more negatively (Hester and Gibson 2003). However, it was also shown that in the case of positive developments, the media present reality even more positively, i.e. the media function as a "magnifying glass" (Van Dalen 2017).

4 Research Desiderata

Economic and financial crises are of great importance to society and lead to special public interest. Nevertheless, economic news coverage consists of much more than 'just' crises. Still, there are more studies that deal with economic crises than economic news coverage in its variety: Smaller and supposedly less spectacular economic issues are underrepresented in research. Some of the analyses in country and time comparisons also largely focus on times of crisis. In this regard, analyses with a broader or different thematic focus would be beneficial.

In addition, some authors question the quality of the news coverage by assuming negativity and biases, as well as a lack of diversity (e.g. Boomgaarden et al. 2011; Brettschneide 2000; Damstra and Boukes 2018; Damstra and Vliegenthart 2018; Hester and Gibson 2003; Knowles et al. 2017; Quiring 2003; Svensson et al. 2017b; Van Dalen et al. 2016). But the phenomenon of tabloidization is rarely or only partially investigated. Methodologically, the results often refer to press coverage, with a few (older) exceptions.

Future research should therefore also take into account a wider range of media information channels. Despite its relevance as a source of information for economics, TV content is much less frequently examined than press coverage. There is also a lack of current research on the presentation of economic issues in fictional TV content (IFEM 2005).

Finally, studies that take the recipient's perspective into account show that economic issues are usually part of everyone's daily life. They shape the way people think about the economy and impact consumerism. In this regard some authors argue that the recipient's perspective should be integrated more strongly. This means data from qualitative or quantitative surveys of recipients should be linked more closely to the results of standardized content analyses (e.g. Alsem et al. 2008; Boomgaarden et al. 2011; Mast et al. 2017; Svensson et al. 2017a).

Furthermore, comparative analyses between countries are less frequent. In addition, data on economic news over time is mainly available for individual countries. Consequently, more comparative analyses between countries and analyses over time would be beneficial.

References

Alsem, K. J., Brakman, S., Hoogduin, L., & Kuper, G. (2008). The impact of newspapers on consumer confidence: Does spin bias exist? *Applied Economics*, *40*(5), 531–539.

Arlt, H.-J., & Stosrz, W. (2010). *Wirtschaftsjournalismus in der Krise. Zum massenmedialen Umgang mit Finanzmarktpolitik. Eine Studie der Otto Brenner Stiftung (Eds.)*. *63*, 1–280.

Arrese, Á., & Vara, A. (2015). Divergent Perspectives? Financial Newspapers and the General Interest Press. In R. G. Picard (Ed.), *The Euro Crisis in the Media: Journalistic Coverage of Economic Crisis and European Institutions* (1st ed., pp. 149–176). London, New York: I.B. Tauris. Bloomsbury Collections.

Bach, T., Weber, M., & Quiring, O. (2012). Das Framing der Finanzkrise. *SCM Studies in Communication and Media*, *1*(2), 193–224.

Bach, T, Weber, M, Quiring, O (2013) News frames, inter-media frame transfer and the financial crisis. *Zeszyty Prasoznawcze 56*(1), 90–110.

Beck, K., Berghofer, S., Dogruel, L., & Greyer, J. (2012). *Wirtschaftsberichterstattung in der Boulevardpresse*. Wiesbaden: Springer VS.

Benford, R. D., & Snow, D. A. (2000). Framing processes and social movements: An overview and assessment. *Annual Review of Sociology, 26*, 611–639.

Berghofer, S., Greyer, J., & Dogruel, L. (2014). Medienkonvergenz im deutschen Boulevard: Eine Organisations- und Inhaltsanalyse von Verwertungsstrategien am Beispiel der Wirtschafts-berichterstattung. *Publizistik*, *59*(1), 27–44.

Boomgaarden, H. G., van Spanje, J., Vliegenthart, R., & de Vreese, C. H. (2011). Covering the crisis: Media coverage of the economic crisis and citizens' economic expectations. *Acta Politica*, *46*(4), 353–379.

Brandstetter, B., & Range, S. (2017). *Wirtschaft: Basiswissen für die Medienpraxis*. Köln: von Halem.

Brettschneider, F. (2000). Reality Bytes: Wie die Medienberichterstattung die Wahrnehmung der Wirtschaftslage beeinflußt. In J. W. Falter, O. W. Gabriel, & H. Rattinger (Eds.), *Wirklich ein Volk? Die politischen Orientierungen von Ost- und Westdeutschen im Vergleich* (pp. 539–569). Wiesbaden: Springer VS.

Brettschneider, F., & Vollbracht, M. (2010). Personalisierung der Unternehmensberichterstattung. In M. Eisenegger & S. Wehmeier (Eds.), *Personalisierung der Organisationskommunikation: Theoretische Zugänge, Empirie und Praxis* (pp. 133–158). Wiesbaden: Springer VS.

Cinalli, M., & Giugni, M. (2018). How did European Citizens Respond to the Great Recession? A Comparison of Claims Making in Nine European Countries, 2008–2014. In J. Roose, M. Sommer, & F. Scholl (Eds.), *Europas Zivilgesellschaft in der Wirtschafts- und Finanzkrise—Protest, Resilienz und Kämpfe um Deutungshoheit* (pp. 19–42). Wiesbaden: Springer VS.

Damstra, A., & Boukes, M. (2018). The Economy, the News, and the Public: A Longitudinal Study of the Impact of Economic News on Economic Evaluations and Expectations. *Communication Research*, 1–25.

Damstra, A., & Vliegenthart, R. (2018). (Un)covering the Economic Crisis?: Over-time and inter-media differences in salience and framing. *Journalism Studies*, *19*(7), 983–1003.

Denner, N., Koch, T., & Senger, S. (2020). Faces of companies: Personalization of corporate coverage in crisis and non-crisis periods. *Journalism*, 1–17.

Dogruel, L., Greyer, J., & Berghofer, S. (2013). Boulevard- vs. Qualitätspresse? Eine Analyse der Qualitätsmerkmale und Boulevardisierungsstrategien am Beispiel von Wirtschaftsberichterstattung. In B. Pfetsch, J. Greyer, & J. Trebbe (Eds.), *MediaPolis—Kommunikation zwischen Boulevard und Parlament. Strukturen, Entwicklungen und Probleme von politischer und zivilgesellschaftlicher Öffentlichkeit.* (pp. 143–160). Konstanz: UVK.

Doudaki, V., Boubouka, A., & Tzalavras, C. (2019). Framing the Cypriot economic crisis: In the service of the neoliberal vision. *Journalism*, *20*(2), 349–368.

Entman, R. M. (1993). Framing: Toward clarification of a fractured paradigm. Journal of Communication, 43, 51–58.

Entman, R. M. (2003). Cascading activation: Contesting the White House's frame after 9/11. Political Communication, 20, 415–432.

Heinrich, J., & Moss, C. (2006). *Wirtschaftsjournalistik: Grundlagen und Praxis* (1. Aufl.). Wiesbaden: Springer VS.

Hester, J. B., & Gibson, R. (2003). The Economy and Second-Level Agenda Setting: A Time-Series Analysis of Economic News and Public Opinion about the Economy. *Journalism & Mass Communication Quarterly*, *80*(1), 73–90.

IFEM. (2005). *Institut f. Empirische Medienforschung: Das Bild des Unternehmers und Freiberuflers in der Fernsehunterhaltung.* Köln.

Kleinnijenhuis, J., Schultz, F., & Oegema, D. (2015). Frame Complexity and the Financial Crisis: A Comparison of the United States, the United Kingdom, and Germany in the Period 2007-2012: Frame Complexity and the Financial Crisis. *Journal of Communication*, *65*(1), 1–23.

Knowles, S., Phillips, G., & Lidberg, J. (2017). Reporting The Global Financial Crisis: A longitudinal tri-nation study of mainstream financial journalism. *Journalism Studies*, *18*(3), 322–340.

Kostadinova, P., & Dimitrova, D. V. (2012). Communicating policy change: Media framing of economic news in post-communist Bulgaria. *European Journal of Communication*, *27*(2), 171–186.

Lischka, J. A. (2014). Different revenue incentives, different content? Comparing economic news before and during the financial crisis in German public and commercial news outlets over time. *European Journal of Communication*, *29*(5), 549–566.

Lohs, A. (2020). (Post-)Wachstum in der Tagesschau? Eine Untersuchung der Berichterstattung der Nachrichtensendung Tagesschau über Wirtschaftswachstum vor dem Hintergrund der (Post-)Wachstumsdebatte. In U. Roos (Ed.), *Nachhaltigkeit, Postwachstum, Transformation* (pp. 241–268). Wiesbaden: Springer Fachmedien.

Mast, C. (2003). *Wirtschaftsjournalismus. Grundlagen und neue Konzepte für die Presse.* (2., völlig überarbeitete und aktualisierte Auflage). Wiesbaden: Springer VS.

Mast, C. (Ed.). (2012). *Neuorientierung im Wirtschaftsjournalismus: Redaktionelle Strategien und Publikumserwartungen*. Wiesbaden: Springer VS.

Mast, C., & Spachmann, K. (2005). *Reformen in Deutschland: Wege einer besseren Verständigung zwischen Wirtschaft und Gesellschaft*. Wiesbaden: Springer VS.

Mast, C., & Spachmann, K. (2014). Strukturen und Trends im Wirtschaftsjournalismus: Herausforderungen für die Medienarbeit. In A. Zerfaß & M. Piwinger (Eds.), *Handbuch Unternehmenskommunikation: Strategie—Management—Wertschöpfung* (pp. 253–269). Wiesbaden: Springer Fachmedien.

Mast, C., & Spachmann, K. (2017). Was leistet der wirtschaftspolitische Journalismus? Strukturen, Strategien und Vorgehensweisen. In K. Otto & A. Köhler (Eds.), *Qualität im wirtschaftspolitischen Journalismus* (pp. 49–73). Wiesbaden: Springer Fachmedien.

Mast, C., Spachmann, K., & Georg, K. (2017). *Kompass der Wirtschaftskommunikation. Themeninteressen der Bürger—Bewertungen der publizistischen Leistungen von Politik, Unternehmen und Journalismus*. Köln: von Halem.

Mercille, J. (2014). The Role of the Media in Sustaining Ireland's Housing Bubble. *New Political Economy*, *19*(2), 282–301.

Merrill, G. J. (2019). *The Political Content of British Economic, Business and Financial Journalism: A Deficit of Perspectives*. Cham: Springer International.

Quiring, O. (2003). Die Fernsehberichterstattung über die Arbeitslosigkeit und ihr Einfluss auf wahlrelevante Vorstellungen der Bevölkerung: Eine Zeitreihenanalyse 1994–1998. *Publizistik*, *48*(1), 1–24.

Quiring, O., Kepplinger, H. M., Weber, M., & Geiß, S. (2013). *Lehman Brothers und die Folgen: Berichterstattung zu wirtschaftlichen Interventionen des Staates.* Wiesbaden: Springer VS.

Scheufele, B., Haas, A., & Brosius, H. B. (2011). Mirror or molder? A study of media coverage, stock prices, and trading volumes in Germany. *Journal of Communication, 61*(1), 48–70.

Shaw, I. S. (2016). *Business journalism: A critical political economy approach*. London ; New York: Routledge.

Sommer, K., Einwiller, S., & Ingenhoff, D. (2010). Wirtschaftsberichterstattung im Rundfunk der Schweiz. *Studies in Communication Sciences: journal of the Swiss Association of Communication and Media Research*, *10*(2), 27–50.

Spachmann, K. (2005). *Wirtschaftsjournalismus in der Presse: Theorie und Empirie*. Konstanz: UVK.

Svensson, H. M., Albæk, E., van Dalen, A., & de Vreese, C. H. (2017a). Good News in Bad News: How Negativity Enhances Economic Efficacy. *International Journal of Communication*, *11*, 1431–1447.

Svensson, H. M., Albæk, E., van Dalen, A., & de Vreese, C. H. (2017b). The impact of ambiguous economic news on uncertainty and consumer confidence. *European Journal of Communication*, *32*(2), 85–99.

Van Dalen, A., de Vreese, C., & Albæk, E. (2017). Economic News Through the Magnifying Glass: How the media cover economic boom and bust. *Journalism Studies*, *18*(7), 890–909.

Van Dalen, A., de Vreese, C. H., & AlbÆk, E. (2016). Mediated uncertainty: The negative impact of uncertainty in economic news on consumer confidence. *Public Opinion Quarterly*, *81*(1), 111–130.

Wu, H. D. (2002). The Conditioned Impact of Recession News: A Time-Series Analysis of Economic Communication in the United States, 1987-1996. *International Journal of Public Opinion Research*, *14*(1), 19–36.

Wu, H. D., McCracken, M. W., & Saito, S. (2004). Economic Communication in the 'Lost Decade': News Coverage and the Japanese Recession. *Gazette (Leiden, NLD)*, *66*(2), 133–149.

Janine Greyer-Stock ist wissenschaftliche Mitarbeiterin und Doktorandin am Institut für Publizistik- und Kommunikationswissenschaft der Freien Universität Berlin. Ihre Forschungsschwerpunkte sind Fernsehprogrammforschung in Deutschland und der Schweiz, Wirtschaftsberichterstattung, Medienqualität und Verantwortung.





Content Analysis in the Research Field of Science Coverage

Sabrina Heike Kessler und Mike S. Schäfer

1 Introduction

Science communication has been defined as encompassing "all forms of communication by and about the sciences, within science (professional audience) as well as in the [broader] public sphere (general audience)" (Acatech 2017, p. 20; cf. Bubela et al. 2009; Bucchi and Trench 2014; Schäfer et al. 2015). This broad understanding of science communication includes all kinds of communication focusing on scientific work or scientific results, be it within science or to non-scientists, in one-directional or dialogical form (Kahan et al. 2017; Schäfer et al. 2019; Trench and Bucchi 2010). It also includes communication about the natural sciences, the arts or the humanities, and it has considerable overlaps with research fields such as health communication and risk communication.

Analyses of science communication emerged in the late 1960s, at the intersection of science education, social studies in science, mass communication, and museology (Trench and Bucchi 2010; Schäfer et al. 2019). The aim of this research was and still is "to understand the underlying mechanisms, structures, and effects of science communication

S. H. Kessler (✉) · M. S. Schäfer
IKMZ - Institut für Kommunikationswissenschaft und Medienforschung, Universität Zürich, Zürich, Schweiz
E-Mail: s.kessler@ikmz.uzh.ch

M. S. Schäfer
E-Mail: m.schaefer@ikmz.uzh.ch

F. Oehmer-Pedrazzi et al. (Hrsg.), *Standardisierte Inhaltsanalyse in der Kommunikationswissenschaft – Standardized Content Analysis in Communication Research,* https://doi.org/10.1007/978-3-658-36179-2_15

[, and in doing so, science communication research] produced a large number of empirical studies on the content of science communication" (Schäfer et al. 2019, p. 77).

Meta-analyses and literature reviews have reconstructed the development of the research field and showed several trends. They have demonstrated that the research field grew in general, with more annual publications and an increasing number of research journals (Guenther and Joubert 2017; Rauchfleisch and Schäfer 2018; Schäfer 2012b). They also showed that content analyses are prevalent in research on science communication, (e.g., Bucchi and Trench 2014; Guenther and Joubert 2017; Kahan et al. 2017; Schäfer 2012b; Trench et al. 2014), that their number has grown significantly in recent decades (Guenther and Joubert 2017; Schäfer 2012b) and that they diversified in their research objects (Schäfer et al. 2019): they have internationalized and analyzed content from a more diverse set of countries (Guenther and Joubert 2017; Schäfer 2012b), analyzed more and more different media (Metag 2017; Schäfer 2017), and more scientific disciplines (Cassidy 2005; Schäfer 2012b; Summ and Volpers 2016).

2 Common Research Designs and Combinations of Methods

Meta-analyses have revealed a variety of research strategies and designs that are used in content-analyses of science communication: quantitative and qualitative content analyses including variants of linguistic (Fløttum 2016) and discourse analyses (e.g., Barr 2011; Koteyko and Atanasova 2016), comparative and cross-sectional studies comparing media outlets (e.g., Cacciatore et al. 2012; O'Neill 2013; Pellechia 1997), different countries (e.g., Metag and Marcinkowski 2014), and temporal developments (e.g., Clark and Illmann 2006; Dudo et al. 2011).

Both qualitative and quantitative content analyses are used equally often in the field, and that relation has remained roughly constant over time; albeit only a few publications combine both research strategies in the same study (Schäfer 2012b). Comparative (i.e., cross-sectional and/or longitudinal) studies make up more than every second analysis, but many researchers also employ case-study designs, analyzing one case in detail (Schäfer 2012b). Recently, analyses of science-related traditional media content have increasingly been supplemented by studies of online and social media communication (cf. Brossard and Scheufele 2013; Schäfer 2012a; e.g., Veltri 2013; Veltri and Atanasova 2017; Wang and Guo 2018).

Researchers in the field often use content analyses in combination with other methods. Studies have combined manual and computational content analysis, such as to detect intermedia agenda setting (Wang and Guo 2018). Content analysis is also frequently combined with population surveys to analyze communication effects, such as framing effects or cultivation. These studies often use content analyses to identify relevant depiction styles or media frames and then analyze the impact of these representations via surveys (Arlt and Wolling 2016; Dudo et al. 2010; Guenther et al. 2015; Guenther and Kessler 2017; Kessler 2016; Zimmermann et al. 2019). Recent

studies also rely on content analysis as a method of evaluation; for example, in Kessler and Guenther (2017) and Kessler and Zillich (2018), eye-tracking recordings are coded by means of content analyses to investigate online search, selection, and reception behavior on scientific topics.

3 Main Constructs Employed in Science-Related Media Content Analyses

Content analyses on science communication have scrutinized diverse objects, issues, and fields. Most of them are single-discipline analyses, primarily (more than 80%) about natural sciences or related research fields such as biotechnology (e.g., Schäfer 2009), medical research (Ruhrmann et al. 2015), climate science (Painter et al. 2016; Schäfer 2012b); nanotechnology (e.g., Anderson et al. 2010; Metag and Marcinkowski 2014), cloning (e.g., Holliman 2004), evolutionary psychology (Cassidy 2005), and astronomy (e.g., Kiernan 2000). The studies analyze the depiction in different media, such as newspapers (e.g., Gavin 2009a), TV (e.g., Göpfert 1996; Kessler 2016) or websites (e.g., Madden et al. 2012), and different countries (albeit with a clear bias toward 'Western' countries; for an overview, see Schäfer 2012b).

Despite this diversity, several commonly analyzed constructs can be distilled from the field. Such common analytical foci of media content analyses are

1. *the overall amount of scientific content:* Individual studies and meta-analyses (for an overview, see Bauer 2011 and Schäfer 2017) have investigated the growth in science-related media coverage mostly in traditional, print media in different countries (e.g., Bauer et al. 2006 in the UK and Bulgarian media; Clark and Illman 2006, Nisbet et al. 2003, and Pellechia 1997 in the US; Elmer et al. 2008 in Germany; Bucchi and Mazzolini 2003 in Italy; Vestergård and Nielsen 2017 in Denmark). They have shown that the amount of science-related media coverage grew until the 2000s, when the growth tailed off and stagnated (e.g. Bauer 2011).
2. *the representation of different actors or sources in media reporting:* Studies examined the importance of different actors in media content and how they are depicted; focusing mostly on scientists and their roles, gender or presentation (Albaek et al. 2003; Fähnrich and Lüthje 2017; Niemi and Pitkänen 2017; Van Gorp et al. 2014). Content analyses of German newspapers and TV-talkshows demonstrated that scientists are quite visible in media coverage (Fähnrich and Lüthje 2017; Kessler and Lachenmaier 2017).
3. *evaluations of science and fundamental "modes" of coverage:* Studies have analyzed the evaluation of science in media coverage (e.g. how critical, affirmative, or diverse the depiction is; cf. Bauer et al. 2006; Elmer et al. 2008; Nelkin 1995;

Schäfer 2009; Vestergård and Nielsen 2017) and identified different modes of media coverage. Characteristic of the research of science communication is the analysis of the "popularization" (Peters, 1994), "science du chef" (Bucchi, 1998), and "mediatization" (Schäfer, 2009) modes of coverage. The popularization and science du chef modes are characterized by presenting scientific information that is explained by scientists or journalists but not problematized or critically questioned. In the mediatization mode, general criteria for journalistic reporting and the media apply to science coverage. These coverage mode often appear outside the science sections of newspapers, is triggered by socio-political or -cultural events, relies less on scientific sources, and is more confrontational and conflictual (Peters 1994; Schäfer 2009).

4. *the accuracy of the reporting as measured by scientific standards:* Studies often tried to assess the accuracy of media coverage about science by comparing it with either scientific publications (e.g., Ankney et al. 1996) or press releases (e.g., Brechman et al. 2009; Sumner et al. 2014). These studies focused on the accuracy of online representations of science and scientific findings, often driven by the assumption that the lack of quality control and journalistic gatekeeping online might result in substandard portrayals of different scientific issues (cf. Barr 2011; Cacciatore et al. 2012; Gavin 2009b). A major focus of these content analyses was the investigation of the **uncertainty presentation of scientific evidence** among different strategic communicators, media, and/or regarding scientific issues (cf. Dudo et al. 2011; Guenther et al. 2019; Kessler 2016; Stocking and Holstein 2009) and especially in risk communication (Anderson et al. 2010; Arlt and Wolling 2016; Cacciatore et al. 2012; Mellor 2010). Media coverage always deviates to some extent from scientific publications; the coverage is often more exaggerated and sensationalist (e.g. Knudsen 2005), simplified, and devoid of complex issues (Brechman et al. 2009), uncertainties are either not or falsely represented (Dudo et al. 2011; Guenther et al. 2019; Kessler 2016; Stocking and Holstein 2009).
5. *the framing of science and scientific findings:* With the shift from one-sided science communication toward more dialogical science communication that understands media as more than translators of science, the analytical focus of content analyses has also changed (Schäfer et al. 2019). Arguably the most important analytical focus was on how science is "framed" in media reporting. Framing research has shown that different facets of science are selected and made salient in media coverage about different issues (e.g., Durant et al. 1998 for genetically modified organisms; Kessler 2016 for medicine; Ruhrmann et al. 2015 for molecular medicine; Nisbet et al. 2003 for biotechnology; Zimmermann et al. 2019 for genetic testing; Gerhards and Schäfer 2009 for human genome research; Schäfer and O'Neill 2017 for climate change). Some studies compared the frames for various media (e.g., Boykoff 2008; Carvalho 2007) and countries (e.g., Boykoff and Boykoff 2007); cross-national framing analyses across longer time spans have even tried to develop generic frame sets that work across topics (e.g., Durant et al. 1998).

6. *visualization of scientific issues:* Content analysis studies also examine visual science communication (i.e., the images used for various topics; Metag 2018; e.g., Rodriguez and Asoro 2012 on genetics and Wynn 2017 on nuclear power). There is a strong research focus on the topic of climate change in this context (e.g., Doyle 2007; O'Neill 2013; Wozniak et al. 2017). It turns out that here some images are used so prominently in public communication that they achieve an iconic status (Metag 2018).

4 Research Desiderata

A fundamental challenge for future research is to broaden the base of available knowledge about science-related content. For that, it would be useful to produce more comprehensive and comparative analyses that include different media, including online and mobile media, focus on different scientific issues/disciplines, and assess science communication in different countries, ideally over time. In particular, these studies should focus on aspects science-related content analyses that are systematically underresearched (Schäfer 2012b; Schäfer et al. 2019), such as non-Western countries, non-print media and especially online communication, and disciplines beyond STEM (science, technology, engineering, and mathematics) subjects.

Furthermore, content analyses should account for new communicative developments. For example, it should focus more on the increasingly multimodal nature of current communication that encompasses textual, visual and other elements (e.g. Wozniak et al. 2015; Zeng et al. 2021), on new communicative forms such as memes and gifs (e.g. Lynch 2008), or on analyses of mobile communication (Taipale and Fortunati 2014).

In addition, the field would benefit from a more thorough attempt to share, re-apply, and standardize research instruments. So far, most individual studies have developed their own instruments, with very little exchange and standardization. This would also involve a more conscious and concerted effort to publish research instruments and data in the first place, in order to allow other researchers to reproduce instruments and measurements in as much detail as possible.

Relevant Variables in DOCA—Database of Variables for Content Analysis.
Scientific evidence/uncertainty: https://doi.org/10.34778/2h

References

Acatech (2017). *Social Media and digital science communication.* Position Paper. Munich: acatech – National Academy of Science and Engineering, German National Academy of Sciences Leopoldina, Union of the German Academies of Sciences and Humanities. https://www.acatech.de/wp-content/uploads/2018/03/WOM2_EN_web_final.pdf.

Albæk, E., Christiansen, P. M., & Togeby, L. (2003). Experts in the mass media: Researchers as sources in Danish daily newspapers, 1961–2001. *Journalism & Mass Communication Quarterly, 80*(4)*,* 937–948.

Anderson, A. A., Brossard, D., & Scheufele, D. A. (2010). The changing information environment for nanotechnology: online audiences and content. *Journal of Nanoparticle Research, 12*(4), 1083–1094.

Ankney, R. N., Heilman, P., & Kolff, J. (1996). Newspaper coverage of the coronary artery bypass grafting report. *Science Communication, 18*(2), 153–164.

Arlt, D., & Wolling, J. (2016). Fukushima effects in Germany? Changes in media coverage and public opinion on nuclear power. *Public Understanding of Science*, *25*(7), 842–857.

Barr, S. (2011). Climate forums: virtual discourses on climate change and the sustainable lifestyle, *Area, 43*(1), 14–22.

Bauer, M. W. (2011). Public attention to science 1820–2010. A 'longue durée' picture. In S. Rödder, M. Franzen & P. Weingart (Eds.), *The sciences' media connection – Communication to the public and its repercussions. Sociology of the Sciences Yearbook* (pp. 35–58). Dordrecht: Springer.

Bauer, M. W., Petkova, K., Boyadjieva, P., & Gornev, G. (2006). Long-term trends in the public representation of science across the 'Iron Curtain': 1946–1995. *Social Studies of Science 36*(1), 99–131.

Boykoff, M. T. (2008). Media and scientific communication: a case of climate change. In D. G. E. Liverman, C. P. G. Pereira, & B. Marker (Eds.), *Communicating environmental geoscience* (Geological Society Special Publication) (pp. 11–18).

Boykoff, M. T., & Boykoff, J. M. (2007). Climate change and journalistic norms: A case-study of US mass-media coverage. *Geoforum, 38*(6), 1190–1204.

Brechman, J., Lee, C., & Cappella, J. N. (2009). Lost in translation?: A comparison of cancer-genetics reporting in the press release and its subsequent coverage in the press. *Science Communication, 30*(4), 453–474.

Brossard, D., & Scheufele, D. A. (2013). Science, new media, and the public. *Science, 339*(40). 40–41.

Bubela, T., Nisbet, M. C., Borchelt, R., Brunger, F., Critchley, C., Einsiedel, E., … Caulfield, T. (2009). Science communication reconsidered. *Nature Biotechnology, 27*(6), 514–518.

Bucchi, M. (1998). *Science and the media. Alternative routes in scientific communication* (Routledge Studies in Science, Technology and Society). London & New York: Routledge.

Bucchi, M., & Mazzolini, R. G. (2003). Big science, little news: science coverage in the Italian daily press, 1946-1997. *Public Understanding of Science, 12*(1), 7–24.

Bucchi, M., & Trench, B. (2014). Science communication research: Themes and challenges. In M. Bucchi & B. Trench (Eds.), *Routledge handbook of public communication of science and technology*, (2nd ed., pp. 1–14). London: Routledge.

Cacciatore, M. A., Anderson, A. A., Choi, D., Brossard, D., Scheufele, D. A., Liang, X., … Dudo, A. (2012). Coverage of emerging technologies: A comparison between print and online media. *New Media & Society, 14*(6), 1039–1059.

Carvalho, A. (2007). Ideological cultures and media discourses on scientific knowledge: re-reading news on climate change. *Public Understanding of Science, 16*(2), 223–243.

Cassidy, A. (2005). Popular evolutionary psychology in the UK: an unusual case of science in the media? *Public Understanding of Science, 14*(2), 115–141.

Clark, F., & Illman, D. L. (2006). A longitudinal study of the *New York Times* Science Times section. *Science Communication, 27*(4), 496–513.

Doyle, J. (2007). Picturing the clima(c)tic. Greenpeace and the representational politics of climate change communication. *Science as Culture, 16*(2), 129–150.

Dudo, A., Brossard, D., Shanahan, J., Scheufele, D. A., Morgan, M., & Signorielli, N. (2010). Science on television in the 21st century: Recent trends in portrayals and their contributions to public attitudes toward science. *Communication Research, 38*(6), 754–777.

Dudo A. D., Dunwoody, S., & Scheufele, D. A. (2011). The emergence of nano news: Tracking thematic trends and changes in U.S. newspaper coverage of nanotechnology. *Journalism Mass Communication, 88*(1), 55–75.

Durant, J., Bauer, M. W., & Gaskell, G. (Eds.). (1998). *Biotechnology in the public sphere. A European sourcebook*. London: Science Museum.

Elmer, C., Badenschier, F., & Wormer, H. (2008). Science for everybody? How the coverage of research issues in German newspapers has increased dramatically. *Journalism & Mass Communication Quarterly, 85*(4), 878–893.

Fähnrich, B., & Lüthje, C. (2017). Roles of social scientists in crisis media reporting: The case of the German populist radical right movement PEGIDA. *Science Communication*, *39*(4), 415–442.

Fløttum, K. (2016). Linguistic analysis approaches for assessing climate change communication. *Oxford Encyclopedia of Climate Change Communication.* Oxford: OUP.

Gavin, N. T. (2009a). Addressing climate change: a media perspective. *Environmental Politics, 18*(5), 765–780.

Gavin, N. T. (2009b). The web and climate change politics lessons from Britain? In T. Boyce & J. Lewis (Eds.), *Climate change and the media* (pp. 129–142). New York: Peter Lang.

Gerhards, J., & Schäfer, M. S. (2009). Two normative models of science in the public sphere: human genome sequencing in German and US mass media. *Public Understanding of Science*, *18*(4), 437–451.

Göpfert, W. (1996). Scheduled science: TV coverage of science, technology, medicine and social science and programming policies in Britain and Germany. *Public Understanding of Science*, *5*(4), 361–374.

Guenther, L., Bischoff, J., Löwe, A., Marzinkowski, H., & Voigt, M. (2019). Scientific evidence and science journalism: Analysing the representation of (un) certainty in German print and online media. *Journalism studies, 20*(1), 40–59.

Guenther, L., Froehlich, K., Milde, J., Ruhrmann, G., & Heidecke, G. (2015). Effects of valenced media frames of cancer diagnoses and therapies: Quantifying the transformation and establishing of evaluative schemas. *Health Communication, 30*(11), 1055–1064.

Guenther, L., & Joubert, M. (2017). Science communication as a field of research: Identifying trends, challenges and gaps by analysing research papers. *Journal of Science Communication, 16*(2), 1–19.

Guenther, L., & Kessler, S. H. (2017). Epistemological dimensions on screen: The role of television presentations in changing conceptions about the nature of knowledge and knowing. *Communications: The European Journal of Communication Research, 42*(4), 481–501.

Holliman, R. (2004). Media coverage of cloning: A study of media content, production and reception. *Public Understanding of Science, 13*(2), 107–130.

Kahan, D. M., Scheufele, D. A., & Jamieson, K. H. (2017). Introduction: Why science communication? In K. H. Jamieson, D. M. Kahan & D. Scheufele (Eds.), *The Oxford handbook on the science of science communication* (pp. 1–11). Oxford: Oxford University Press.

Kessler, S. H. (2016). *Das ist doch evident! Eine Analyse dargestellter Evidenzframes und deren Wirkung am Beispiel von TV-Wissenschaftsbeiträgen* [It's evident! Identifying frames of evidence as used in science TV programs and testing their effects on beliefs] (Gesundheitskommunikation | Health Communication 12). Baden-Baden: Nomos.

Kessler, S. H., & Guenther, L. (2017). Eyes on the frame: Explaining people's online searching behavior in response to TV consumption. *Internet Research, 27*(2), 303–320.

Kessler, S. H., & Lachenmaier, C. (2017). Ohne Belege in den Talkshow-Olymp. Belegmuster und Akteure in Polit-Talkshows zur Griechenlandkrise. [No evidence on talk show olympics. Evidence patterns and actors in political talk shows on the Greek crisis]. *Medien & Kommunikationswissenschaft, 65*(1), 64–82.

Kessler, S. H., & Zillich, A. F. (2018). Searching online for information about vaccination: Assessing the influence of user-specific cognitive factors using eye-tracking. *Health Communication, 44*(2), 225–247.

Kiernan, V. (2000). The Mars Meteorite: A case study in controls on dissemination of science news. *Public Understanding of Science, 9*(1), 15–41.

Knudsen, S. (2005). Communicating novel and conventional scientific metaphors: A study of the development of the metaphor of genetic code. *Public Understanding of Science, 14*(4). 373–392.

Koteyko, N., & Atanasova, D. (2016). Discourse analysis in climate change communication. *Oxford Research Encyclopedia of Climate Science.* Oxford: OUP.

Lynch, A. (2008). *Thought contagion: How belief spreads through society: The new science of memes*. New York: Basic Books.

Madden, K., Nan, X., Briones, R., & Waks, L. (2012). Sorting through search results: A content analysis of HPV vaccine information online. *Special Issue: The Role of Internet Use in Vaccination Decisions, 30*(25), 3741–3746.

Mellor, F. (2010). Negotiating uncertainty: asteroids, risk and the media. *Public Understanding of Science*, *19*(1), 16–33.

Metag, J. (2017). Rezeption und Wirkung öffentlicher Wissenschaftskommunikation [Reception and effect of public science communication]. In H. Bonfadelli, B. Fähnrich, C. Lüthje, J. Milde, M. Rhomberg & M. Schäfer (Eds.), *Forschungsfeld Wissenschaftskommunikation* (pp. 251–274). Wiesbaden: Springer VS.

Metag, J. (2018). Visuelle Wissenschaftskommunikation. In K. Lobinger (Ed.), *Handbuch Visuelle Kommunikationsforschung* (pp. 1-22). Wiesbaden: Springer VS.

Metag, J., & Marcinkowski, F. (2014). Technophobia towards emerging technologies? A comparative analysis of the media coverage of nanotechnology in Austria, Switzerland and Germany. *Journalism, 15*(4), 463–481.

Nelkin, D. (1995). Science controversies. The dynamics of public disputes in the United States. In S. Jasanoff, G. E. Markle, J. C. Petersen & T. Pinch (Eds.), *Handbook of science and technology studies* (pp. 444–456). Thousand Oaks, London & New Delhi: Sage.

Niemi, M. K., & Pitkänen, V. (2017). Gendered use of experts in the media: Analysis of the gender gap in Finnish news journalism. *Public Understanding of Science*, *26*(3), 355–368.

Nisbet, M. C., Brossard, D., & Kroepsch, A. (2003). Framing science: The stem cell controversy in an age of press/politics. *Harvard International Journal of Press/Politics, 8*(2), 36–70.

O'Neill, S. J. (2013). Image matters. Climate change imagery in US, UK and Australian newspapers. *Geoforum, 49,* 10–19.

Painter, J., Erviti, M. C., Fletcher, R., Howard, C., Kristiansen, S., Leon, B., … Schäfer, M. S. (2016). *Something old, something new. Digital media and the coverage of climate change*. Oxford: Reuters Institute for the Study of Journalism.

Pellechia, M. G. (1997). Trends in science coverage: A content analysis of three US newspapers. *Public Understanding of Science, 6*(1), 49–68.

Peters, H. P. (1994). Wissenschaftliche Experten in der öffentlichen Kommunikation über Technik, Umwelt und Risiken [Scientific experts in public communication about technology, environment and risks]. In Friedhelm Neidhardt (Ed.), *Öffentlichkeit, öffentliche Meinung, soziale Bewegungen (Sonderheft 34 der Kölner Zeitschrift für Soziologie und Sozialpsychologie)* (pp. 162–190). Opladen: Westdeutscher Verlag.

Rauchfleisch, A., & Schäfer, M. S. (2018). Structure and development of science communication research: Co-citation analysis of a developing field. *Journal of Science Communication, 17*(3), 1–21.

Rodriguez, L., & Asoro, R. L. (2012). Visual representations of genetic engineering and genetically modified organisms in the online media. *Visual Communication Quarterly, 19*(4), 232–245.

Ruhrmann, G., Guenther, L., Kessler, S. H., & Milde, J. (2015). Frames of scientific evidence: How journalists represent the (un)certainty of molecular medicine in science television programs. *Public Understanding of Science, 24*(6), 681–696.

Schäfer, M. S. (2009). From public understanding to public engagement: An empirical assessment of changes in science coverage. *Science Communication, 30*(4), 475–505.

Schäfer, M. S. (2012a). Online communication on climate change and climate politics: a literature review. *Wiley Interdisciplinary Reviews–Climate Change, 3*(6), 527–543.

Schäfer, M. S. (2012b). Taking stock: a meta-analysis of studies on the media's coverage of science. *Public Understanding of Science, 21*(6), 650–663.

Schäfer, M. S. (2017). How changing media structures are affecting science news coverage. In K. H. Jamieson, D. M. Kahan & D. Scheufele (Eds.), *The Oxford handbook on the science of science communication* (pp. 51–60). Oxford: Oxford University Press.

Schäfer, M. S., Kessler, S. H., & Fähnrich, B. (2019). Analyzing science communication through the lens of communication science: Reviewing the empirical evidence. In A. Lessmöllmann, M. Dascal, & T. Gloning (eds.), *Science Communication* (pp. 77–104). Berlin: de Gruyter.

Schäfer, M. S., Kristiansen, S., & Bonfadelli, H. (2015). Wissenschaftskommunikation im Wandel: Relevanz, Entwicklung und Herausforderungen des Forschungsfeldes [Science communication in transition: relevance, development and challenges of the research field]. *Wissenschafts-kommunikation im Wandel*, 10–42.

Schäfer, M. S., & O'Neill, S. (2017). Frame analysis in climate change communication. In M. C. Nisbet, S. S. Ho, E. Markowitz, S. O'Neill, M. S. Schäfer & J. Thaker (Eds.), *Encyclopedia of climate change communication,* Online first. New York: Oxford University Press.

Stocking, S. H., & Holstein, L. W. (2009). Manufacturing doubt: journalists' roles and the construction of ignorance in a scientific controversy. *Public Understanding of Science*, *18*(1), 23–42.

Summ, A., & Volpers, A. (2016). What's science? Where's science? Science journalism in German print media. *Public Understanding of Science, 25*(7), 775–790.

Sumner, P., Vivian-Griffiths, S., Boivin, J., Williams, A., Venetis, C. A., Davies, A., … Chambers, C. D. (2014). The association between exaggeration in health related science news and academic press releases: retrospective observational study. *BMJ, 349*.

Taipale, S., & Fortunati, L. (2014). Capturing methodological trends in mobile communication studies. *Information, Communication & Society, 17*(5), 627–642,

Trench, B., & Bucchi, M. (2010). Science communication, an emerging discipline: Road maps for the 21st century research in science communication. *Journal of Science Communication 9*(3), C01.

Trench, B., Bucchi, M., Amin, L., Cakmakci, G., Bankole, F., Olesk, A., … Polino, C. (2014). Global spread of science communication. In M. Bucchi & B Trench (Eds.), *Handbook of public communication of science and technology* (2nd ed., pp. 214–230). London: Routledge.

Van Gorp, B., Rommes, E., & Emons, P. (2014). From the wizard to the doubter: Prototypes of scientists and engineers in fiction and non-fiction media aimed at Dutch children and teenagers. *Public Understanding of Science*, *23*(6), 646–659.

Veltri, G. A. (2013). Microblogging and nanotweets: Nanotechnology on Twitter. *Public Understanding of Science*, *22*(7), 832–849.

Veltri, G. A., & Atanasova, D. (2017). Climate change on Twitter: Content, media ecology and information sharing behaviour. *Public Understanding of Science*, *26*(6), 721–737.

Vestergård, G. L., & Nielsen, K. H. (2017). From the preserves of the educated elite to virtually everywhere: A content analysis of Danish science news in 1999 and 2012. *Public Understanding of Science*, *26*(2), 220–234.

Wang, W., & Guo, L. (2018). Framing genetically modified mosquitoes in the online news and Twitter: Intermedia frame setting in the issue-attention cycle. *Public Understanding of Science*, *27*(8), 937–951.

Wozniak, A., Lück, J., & Wessler, H. (2015). Frames, stories, and images: The advantages of a multimodal approach in comparative media content research on climate change. *Environmental Communication, 9*(4), 469–490.

Wozniak, A., Wessler, H., & Lück, J. (2017). Who prevails in the visual framing contest about the united nations climate change conferences? *Journalism Studies, 6*(1), 1–20.

Wynn, J. (2017). Meltdowns in the media: Visualization of radiation risk from the printed page to the internet. In A. G. Gross (Ed.), *Science and the Internet. Communicating knowledge in a digital age* (pp. 191–220). London/New York: Routledge.

Zeng, J., Schäfer, M. S., & Allgaier, J. (2020). Reposting “till albert einstein is TikTok famous”: The memetic construction of science on TikTok. International Journal of Communication, 15, 3216–3247.

Zimmermann, B. M., Aebi, N., Kolb, S., Shaw, D., & Elger, B. S. (2019). Content, evaluations and influences in newspaper coverage of predictive genetic testing: A comparative media content analysis from the United Kingdom and Switzerland. *Public Understanding of Science, 28*(3), 256–274.

Dr. Sabrina Heike Kessler is a senior research and teaching associate at the Division of Science, Crisis, & Risk Communication of the Department of Communication and Media Research, University of Zurich (Switzerland). She holds a PhD in communication science from the Friedrich Schiller University Jena (Germany). Her research interests include science and health communication as well as online search and perception behavior. She tweets under @SabrinaKessler.

Prof. Dr. Mike S. Schäfer is professor of science communication at the Department of Communications and Media Research as well as director of the Center for Higher Education and Science Studies (CHESS) at the University of Zurich. He is also president of the AGORA committee of the Swiss National Science Foundation. His research focuses on science communication, climate change communication, online communication and public sphere theory.


cc
BY



Content Analysis in the Research Field of Health Coverage

Doreen Reifegerste und Annemarie Wiedicke

1 Introduction

Health communication has been defined as "any type of human communication whose content is concerned with health" (Rogers 1996, p. 15). This broad understanding includes a variety of health-relevant communication such as media coverage, advertising, online support groups, health application in smartphones, fictional content in entertainment formats and other ones. These formats could also be scrutinized by the means of content analysis. However, in this chapter we only focus on the news coverage of health topics by media or news organizations, i.e., health (care) or medical journalism (Walsh-Childers et al. 2018). While medical journalism rather focuses on healthcare and the medical treatment of diseases, health journalism also includes public health (promotion) topics such as physical activity, fitness, well-being, and nutrition in relation to the holistic health definition by the World Health Organization (1946). It mainly aims at informing and explaining health issues and health policies in an evidence-based and understandable way (Wormer 2011). This field of research has considerable overlaps with research fields such as science communication, risk communication, and organizational communication about health topics.

D. Reifegerste (✉)
Fakultät für Gesundheitswissenschaften, Universität Bielefeld, Bielefeld, Deutschland
E-Mail: doreen.reifegerste@uni-bielefeld.de

A. Wiedicke
Institut für Kommunikationswissenschaft und Medienforschung, LMU München, München, Deutschland
E-Mail: annemarie.wiedicke@ifkw.lmu.de

F. Oehmer-Pedrazzi et al. (Hrsg.), *Standardisierte Inhaltsanalyse in der Kommunikationswissenschaft – Standardized Content Analysis in Communication Research,* https://doi.org/10.1007/978-3-658-36179-2_16

The content of health-related news coverage most often includes information about the risks and the treatment options of diverse diseases (Ruhrmann and Guenther 2014). Above all, prevention or screening measures (e.g., vaccinations for communicable disease or mammography for cancer prevention) and innovations in medical therapy are also a relevant part of health news (Ruhrmann and Guenther 2014). Advances in medical research and resulting chances and risks are often presented as controversies (Ruhrmann et al. 2011). Journalists increasingly include ethical issues or financial costs of healthcare in their coverage, but questions of health policies or (financial) complexities of the health system are still neglected (Wormer 2014).

A recent systematic analysis of studies in medical journalism (Catalan-Matamoros and Peñafiel-Saiz 2019a) showed that vaccination as a health topic clearly dominated health news research, with 13 studies focusing on HPV vaccine coverage (Gollust et al. 2016), while other topics like pharmaceutical funding, health politics or medication errors were much less frequently analyzed (Catalan-Matamoros and Peñafiel-Saiz 2019a). An earlier overview of health-related studies revealed that most studies analyzed media content about cancer, HIV/AIDS, smoking, alcohol consumption, and nutrition (Nazione et al. 2013).

2 Common Research Designs and Combinations of Methods

News coverage of health topics is presented in various forms (text, pictures or audio-visual) in a broad spectrum of very different media channels (e.g., print, television, websites or social media). Due to increasing convergence of media formats and transformation processes in news production (Walsh-Childers et al. 2018) different formats, sources and media channels are mixed. Thus, different kinds of content analysis methods have to be integrated in order to examine, for example, posts on social media, which often contain text as well as images andvideos. Here, a combination of quantitative and qualitative, manual and automated, textual and visual methods for content analysis is utilized to examine health journalism (Dobbelaer et al. 2018). To integrate the audiences' perspective in the content analysis, eye-tracking data can be combined with the content analysis of texts. This approach is used to select only those textual or visual contents that are looked at by the readers (e.g., Kessler et al. 2020).

The analysis of visual, auditive or interactive materials like images, video or audio seems especially relevant, because they have been (in contrast to text) far less often analyzed by researchers (Catalan-Matamoros and Peñafiel-Saiz 2019a). This does neither reflect journalistic processes nor the mass media preferences of the public. Rather, this imbalance is due to the typical sampling procedures of media researchers, because text-based media content, such as print and online news articles, is more easily available and codable (Teixeira et al. 2012). Still, journalists increasingly transmit their information

via podcasts, videocasts, or datavisualizations (Malecki et al. 2019) Thus, health communication scholars should consider these formats when examining health coverage.

With regards to the analysis of images and videos, some exceptions can be found: For example, Kessler and Schwender (2012) analyzed portrayals of older people in news magazines. Catalan-Matamoros and Peñafiel-Saiz (2019b) found that visuals appeared in 56% of the coverage about vaccines in the flagship Spanish newspapers. Yoo and Kim (2012) studied the portrayal of obesity in YouTube Videos. Cohen et al. (2019) examined the presentation of body positivity in Instagram posts (captions and images).

In conclusion, it seems necessary to broaden the media repertoire that is considered for content analysis. While most content analyses still rely on traditional newspapers (Catalan-Matamoros and Peñafiel-Saiz 2019a), a lot of health issues such as nutrition are presented in magazines (e.g., lifestyle, wellness issues), books (e.g., self-help books), brochures as well as user-generated content like blogs, user comments, and influencer profiles (Jones and Taylor 2013). Recent studies increasingly rely on the (semi-) automated content analysis to analyze health coverage in online or social media like Twitter and YouTube (Gibson et al. 2019). Using computational methods, the analysis of health news coverage by professional journalists can also be extended to the analysis of user comments (Lee and McElroy 2019).

Systematic analyses of the research field have revealed that (quantitative) content analyses are frequently used to examine health journalism (Hannawa et al. 2015; Kline 2006; Meadows 2017). To answer research questions about the attitudes or practices of journalists or news production processes, content analyses are often combined with surveys and in-depth interviews among communicators or observations in newsrooms. Another more recent strand of research also analyzes the hyperlinks within health news that are provided by journalists as „digital navigation cues […] in the increasingly complex and vast online health information" (Stroobant 2019, p. 2138).

In addition, content analyses are often the basis for research about media usage, information seeking or media effects (Scherer and Link 2019). Consequently, content analyses are often conducted in combination with surveys or experiments. For example, in framing research a content analysis can reveal the presence of social determinants of diabetes in news coverage (Gollust and Lantz 2009), while experimental testing of such messages can inform about their effects on recipients' opinion and attitudes towards this health issue (Gollust et al. 2009). Another study analyzed news portrayals of cancer causes and prevention in television and newspaper. In a second study, the authors tested the effects of this coverage on cancer-related attitudes (Niederdeppe et al. 2014). Here, also long-term content analyses are needed to detect relations with temporal developments or certain events and a resulting change of attitudes or behavior of the audience. For example, a content analysis of 30 years of news coverage on breast cancer has shown not only an increase of coverage and therefore rising public awareness for this topic over time, but also how the media coverage intertwines, e.g., with celebrity cases that in turn appeared to draw attention to the importance of early detection methods, such as mammography (Sooyoung Cho 2006).

3 Main Constructs Employed in Content Analyses of Health Coverage

Many studies in the research field health communication lack theoretical foundation and only present descriptive and comparative results. Manganello and Blake (2010) found in their meta-analysis of health communication studies that 55% of the content analyses in the sample were based on certain theories or approaches. Mostly these approaches originate from media usage or media effects research, such as the social-cognitive theory (Bandura 2001), the cultivation approach (Gerbner et al. 1986), agenda-setting (Rössler 2019), or framing (see below). This indicates that researchers are rather interested in the effects of media content than the production or creators of media content (Scherer and Link 2019).

Quality: Many content analyses of health information examine the quality, i.e., the fulfillment of certain criteria such as evidence and understandability of the content. Both of these criteria are increasingly relevant as people use online health information more frequently and in addition to the information from their physician for medical decision making (Wang et al. 2019). Thus, analyzing the accuracy of content becomes even more relevant. However, the internet provides a variety of health information from diverse sources, which are very heterogeneous in their medical expertise and their interests. As Schwitzer (2017) points out, there are many quality problems due to hurried, incomplete, poorly researched news, which are not necessarily published with a deceitful intent and thus are so-called *fake news.* For example, anti-vaccination websites of play a large role in disseminating misinformation (Kata 2010). Here, misinformation was indicated by the use of outdated sources, misrepresentations, false conclusion, self-referencing, or no references, to support the given claims.

To measure quality, the content of health news coverage is either compared to evidence-based medical recommendations and theoretical assumptions, or the quality of media content is continuously judged by journalists or medical experts with respect to different criteria. Comparisons of news content with healthcare guidelines or medical results and the derived recommendations regularly reveal a great divergence. For instance, user-generated health information (such as YouTube videos) about vaccination often present a much more negative attitude towards vaccination (than, for instance, the recommendations of the World Health Organization) and are also lacking evidence based information (Briones et al. 2012). Journalistic content is frequently criticized for not reflecting the medical recommendations as well. While state policy and institutions like the Center for Disease Control and Prevention clearly recommended the HPV vaccine for boys, media coverage was more concerned about the controversies around the vaccine in the context of the presidential campaign in 2011. Only 25% of news articles mentioned that boys were also vaccine-eligible (Krakow and Rogers 2016).

The continuous monitoring of quality in health journalism is institutionalized in different countries under terms like *HealthNewsReview* in Canada and the United States or *media doctor* in Australia and Germany (Schwitzer 2008; Wormer 2011). Catalogues

with criteria like understandability, the portrayal of costs, benefits, risks as well as transparency about conflict of interests and independent sources are used to judge the quality of health news (Serong et al. 2019). Although the vast amount of health news makes it impossible to test all of them (and false information in user-generated content on social media might even be the more severe issue), these reviews indicate that only a minority of articles fulfill the quality criteria of the monitoring. One often failed criterion was the discussion of the available evidence for the presented results (Anhäuser and Wormer 2012).

A further reason for the decline in quality of health information are time constraints, a lack of staff resources as well as a lack of necessary skills in newsroom staffing (Walsh-Childers et al. 2018). Many producers in the health-related social media production, e.g., for topics like nutrition, fitness or similar are not medically trained, and even journalists reporting on health news often lack the competence for interpreting scientific results (Walsh-Childers et al. 2018). Another factor that can have a negative impact on the quality of health information is the influence of public relations activities by powerful actors, e.g., pharmaceutical companies or medical journals. They provide the media with ready-made news, including professional storytelling, which are often copied without further editing (Dobbelaer et al. 2018). Thus, the quality of newspaper articles is highly influenced by the quality of press releases issued by medical journals (Schwartz et al. 2012). Only content analyses that compare input and output can detect these influences clearly (for an example see Reifegerste et al. 2014). But beyond quality concerns it might also be relevant to include different actors of the health-related discourse. By analyzing the sourcing practices behind the content, Dobbelaer et al. (2018) found that patients and civil society actors are more often cited in weeklies and women's magazines than in general interest and health magazines. This emphasizes the need to include more diverse media formats in content analyses.

Frequency of topics and intensity of media coverage: The frequency or intensity of media coverage of a certain health issue often differs from the prevalence or mortality rates and therefore the societal impact of this health issue, because journalists select their stories based on news values and audience perceptions and not only on public sphere orientations or health reporting (Holland 2018). Thus, media coverage about specific health topics rather reacts to acute risks or crisis, controversially discussed diseases or treatment options, or the case of celebrities. For example, the AIDS/HIV infection of the actor Rock Hudson and his dead in 1985 or the breast cancer of Angelina Jolie intensified reporting about these topics without a change of the mortality or prevalence rates (Cajkovac 2015; LoRusso 2017).

The accentuation to the point of overrepresentation of some topics also entails that others are underrepresented in the media coverage in relation to their prevalence or importance for the public. Additionally, diseases and health problems that rarely exist in certain countries are often missing in media coverage (Kline 2006). Historically, cancer disease was underrepresented in the media due to **stigmatization** in the first decades (Grimm and Baumann 2019). In recent media coverage, mental health issues are less

often reported than physical health problems (Scherr 2019). To detect such blind spots, results of content analyses have to be compared to health reports.

Inaccuracies *and exaggerations:* In addition to underrepresentation, inaccuracies and exaggerations can contribute to the stigmatization of certain health issues as well. This especially affects mental health, as media descriptions of mental illness and the mentally ill are often characterized by inaccuracies, exaggerations, or misinformation. Thus, in media coverage mental illnesses are often associated with crimes and violence (Ma 2017). For example, a content analysis of Italian newspaper articles focusing on violent acts like homicide found that about 40% of these deeds were addressed to people with mental illnesses (Carpiniello et al. 2007). Findings from McGinty et al. (2014) suggest that the media often portray the issue of serious mental illness in the context of mass shootings and therefore strongly emphasize the association between mental health issues and violence. In consequence, patients are presented not only as peculiar and different, but also as dangerous. Thus, the media maintain misconceptions and stigma (Klin and Lemish 2008; Srivastava et al. 2018). Again, content analyses are crucial for identifying such misconceptions in the media coverage and therefore a first step towards reducing stigma. While most content analyses still report negative portrayals of mental illness, other results suggest the number of such stories is decreasing (Ma 2017).

Uncertainty and evidence depiction: Research suggests that new evidence for health topics is often presented in a biologically deterministic and simplified manner (Brechman et al. 2009). For example, through comparing the depiction of genetic research results relating to cancer outcomes in press releases and mainstream print media to the original presentation in scholarly journals, Brechman et al. (2011) show that as scientific knowledge is filtered and translated for a broader public, there are changes and inconsistencies resulting in media coverage that does not fairly represent the original research. Additionally, the scientific evidence is rarely discussed in science articles, and research findings are mostly presented as scientifically certain (Guenther et al. 2019). Moreover, research indicates that medical issues on science TV programs are depicted with different levels of evidence, presenting different argumentations (Kessler 2016).

Framing of health issues: Another analytical construct often employed in content analyses of health coverage is framing. In one of the most operationalized framing definitions (Matthes 2014), Entman (1993) describes framing mainly as process of selection and salience. From the four framing elements Entman refers to in his definition, the mediated attribution of responsibility for causes and remedies (treatments, solutions) is eminently relevant for public health, as these so-called responsibility frames (Iyengar 1990; Semetko and Valkenburg 2000) play a key role in the formation of public opinion by affecting attributions of responsibility (Gollust et al. 2013) and intentions for individual health behavior, interpersonal behavior or societal participation (Sun et al. 2016). For several health topics, e.g., obesity (Kim and Willis 2007), eating disorders (O'Hara and Smith 2007), cognitive enhancement (Schäfer et al. 2016), diabetes (Stefanik-Sidener 2013), molecular medicine (Ruhrmann et al. 2015) or depression (Zhang et al. 2016), research has shown that the media attribute more

causal and problem-solving responsibilities to the individual than to the society. This may not only affect the willingness to help others, but also lead to dismissive attitudes towards institutional or organizational interventions (Lundell et al. 2013) as well as self-stigmatization in patients (Vogel et al. 2006).

Besides examining media frames through content analyses, researchers have extensively studied the effects of framing on the audience (Borah 2011). This is especially true for gain and loss framing of health topics, which has been analysed by a variety of effect studies (e.g., Latimer et al. 2008; Mays and Evans 2017; Park et al. 2010). Future research should additionally focus on the portrayal of gain and loss in health coverage.

4 Research Desiderata

The future development of studies analyzing health-related media coverage should provide a more comprehensive perspective, including more cultures, health systems, and countries; as well as a broader media perspective by examining more magazines, television, andradio content (Catalan-Matamoros and Peñafiel-Saiz 2019a). Furthermore, research should assess the content of other professional information providers, such as information services of hospitals, more frequently (Kessler and Schmidt-Weitmann 2019). Finally, content analyses should account for visual communication like images and videos on Instagram, YouTube and Pinterest (Guidry et al. 2016) or visuals in print health materials (e.g., about cancer) (King 2015).

Another bias in research relates to the underrepresentation of publications (and thus also of media coverage) from developing countries. While most research stems from the US or other high-income countries, there is a lack of studies from low-income countries or countries with diverse cultures or different media systems (Catalan-Matamoros and Peñafiel-Saiz 2019a). However, it can be assumed the media coverage of health topics also reflects the different cultural backgrounds and health systems. For example, a content analysis by Zhang and Jin (2015) examined the differences regarding the framing between Chinese and US newspapers, exploring how cultural values and organizational constraints influenced the frame-building process. The results suggest that diverging cultural values (collectivistic in China vs. individualistic in the US) may shape the ways in which news media emphasize either societal or individual responsibilities when covering depression. However, such comparisons of media coverage in culturally different countries are still rare exceptions.

In addition, future research should consider health information seeking behaviors more frequently: The searching behavior could serve as a starting point for content analyses (e.g., the Google search results of users, Madden et al. 2012) instead of relying on traditional (top-down fixed) sampling techniques. Thus, it could be useful to combine content analyses with eye-tracking or log data of websites or apps (Kessler and Guenther 2017). Another way of extending the perspective to user-generated content could be

to integrate the analysis of content in online support groups or health platforms (Link 2019). Finally, in order to a more comprehensive view on factors that influence health news production as well as effects on the audience's attitudes and behavior, more longitudinal studies in combination with other methods are necessary.

Relevant Variables in DOCA – Database of Variables for Content Analysis

Quality: https://doi.org/10.34778/2a
Inaccuracies and exaggerations: https://doi.org/10.34778/2b
Framing responsibility: https://doi.org/10.34778/2d
Stigmatization: https://doi.org/10.34778/2c

References

Anhäuser, M., & Wormer, H. (2012). A question of quality: Criteria for the evaluation of science and medical reporting and testing their applicability. *PCST 2012 Book of Papers: Quality, Honesty and Beauty in Science and Technology Communication*. Retrieved from http://www.medien-doktor.de/medizin/wp-content/uploads/sites/3/downloads/2014/04/Paper-Florenz.pdf.

Bandura, A. (2001). Social cognitive theory of mass communication. *Media Psychology*, *3*(3), 265–299.

Borah, P. (2011). Conceptual issues in framing theory: A systematic examination of a decade's literature. *Journal of Communication*, *61*(2), 246–263.

Brechman, J. M., Lee, C.-J., & Cappella, J. N. (2009). Lost in translation? A comparison of cancer-genetics reporting in the press release and its subsequent coverage in lay press. *Science Communication*, *30*(4), 453–474.

Brechman, J. M., Lee, C.-J., & Cappella, J. (2011). Distorting genetic research about cancer: From bench science to press release to published news. *Journal of Communication*, *61*(3), 496–513.

Briones, R., Nan, X., Madden, K., & Waks, L. (2012). When vaccines go viral: An analysis of HPV vaccine coverage on YouTube. *Health Communication*, *27*(5), 478–485.

Cajkovac, V. (Ed.) (2015). *AIDS - Nach einer wahren Begebenheit: [AIDS - A true occurence]*. Dresden: Verl. des Dt. Hygienemuseums.

Carpiniello, B., Girau, R., & Orrù, M. G. (2007). Mass-media, violence and mental illness. Evidence from some Italian newspapers. *Epidemiologia E Psichiatria Sociale*, *16*(3), 251–255.

Catalan-Matamoros, D., & Peñafiel-Saiz, C. (2019a). The use of traditional media for public communication about medicines: A systematic review of characteristics and outcomes. *Health Communication*, *34*(4), 415–423.

Catalan-Matamoros, D., & Peñafiel-Saiz, C. (2019b). A visual content analysis of vaccine coverage in the print media. *Human Vaccines & Immunotherapeutics*, *15*(10), 2453–2459.

Cohen, R., Irwin, L., Newton-John, T., & Slater, A. (2019). #bodypositivity: A content analysis of body positive accounts on Instagram. *Body Image*, *29*, 47–57.

Dobbelaer, R. de, van Leuven, S., & Raeymaeckers, K. (2018). The human face of health news: A multi-method analysis of sourcing practices in health-related news in Belgian magazines. *Health Communication*, *33*(5), 611–619.

Entman, R. M. (1993). Framing: Toward clarification of a fractured paradigm. *Journal of Communication*, *43*(4), 51–58.

Gerbner, G., Gross, L., Morgan, M., & Signorielli, N. (1986). Living with television: The dynamics of the cultivation process. In J. Bryant & D. Zillmann (Eds.), Perspectives on media effects (pp. 17–40). New Jersey: Lawrence Erlbaum Associates.

Gibson, L. A., Siegel, L., Kranzler, E., Volinsky, A., O'Donnell, M. B., Williams, S., . . . Hornik, R. C. (2019). Combining crowd-sourcing and automated content methods to improve estimates of overall media coverage: Theme mentions in E-cigarette and other tobacco coverage. *Journal of Health Communication*, *24*(12), 889–899.

Gollust, S. E., & Lantz, P. M. (2009). Communicating population health: Print news media coverage of type 2 diabetes. *Social Science and Medicine*, *69*(7), 1091–1098.

Gollust, S. E., Lantz, P. M., & Ubel, P. A. (2009). The polarizing effect of news media messages about the social determinants of health. *American Journal of Public Health*, *99*(12), 2160–2167.

Gollust, S. E., LoRusso, S. M., Nagler, R. H., & Fowler, E. F. (2016). Understanding the role of the news media in HPV vaccine uptake in the United States: Synthesis and commentary. *Human Vaccines & Immunotherapeutics*, *12*(6), 1430–1434.

Gollust, S. E., Niederdeppe, J., & Barry, C. L. (2013). Framing the consequences of childhood obesity to increase public support for obesity prevention policy. *American Journal of Public Health*, *103*(11), e96–e102.

Grimm, M., & Baumann, E. (2019). Mediale Kommunikation im Kontext von Krebserkrankungen. In C. Rossmann & M. R. Hastall (Eds.), *Handbuch der Gesundheitskommunikation: Kommunikationswissenschaftliche Perspektiven*. Wiesbaden: Springer.

Guenther, L., Bischoff, J., Löwe, A., Marzinkowski, H., & Voigt, M. (2019). Scientific evidence and science journalism. *Journalism Studies*, *20*(1), 40–59.

Guidry, J., Zhang, Y., Jin, Y., & Parrish, C. (2016). Portrayals of depression on Pinterest and why public relations practitioners should care. *Public Relations Review*, *42*(1), 232–236.

Hannawa, A. F., Garcia-Jimenez, L., Candrian, C., Rossmann, C., & Schulz, P. J. (2015). Identifying the field of health communication. *Journal of Health Communication*, *20*(5), 521–530.

Holland, K. (2018). Making mental health news. *Journalism Studies*, *19*(12), 1767–1785.

Iyengar, S. (1990). Framing responsibility for political issues: The case of poverty. *Political Behavior*, *12*(1), 19–40.

Jones, S., & Taylor, B. (2013). Food Journalism. In B. Turner & R. Orange (Eds.), *Specialist Journalism* (pp. 96–106). Routledge.

Kata, A. (2010). A postmodern Pandora's box: anti-vaccination misinformation on the Internet. *Vaccine*, *28*(7), 1709–1716.

Kessler, E.-M., & Schwender, C. (2012). Giving dementia a face? The portrayal of older people with dementia in German weekly news magazines between the years 2000 and 2009. *The Journals of Gerontology. Series B, Psychological Sciences and Social Sciences*, *67*(2), 261–270.

Kessler, S. H. (2016). *Das ist doch evident! Eine Analyse dargestellter Evidenzframes und deren Wirkung am Beispiel von TV-Wissenschaftsbeiträgen* [That's evident. An analysis of depicted evidence frames and ist effects]. Baden-Baden: Nomos.

Kessler, S. H., & Guenther, L. (2017). Eyes on the frame. *Internet Research*, *27*(2), 303–320.

Kessler, S. H., Mede, N. G., & Schäfer, M. S. (2020). Eyeing CRISPR on Wikipedia: Using eye tracking to assess what lay audiences look for to learn about CRISPR and genetic engineering. *Environmental Communication*, 1–18. https://doi.org/10.1080/17524032.2020.1723668.

Kessler, S. H., & Schmidt-Weitmann, S. (2019). Diseases and emotions: An automated content analysis of health narratives in inquiries to an online health consultation service. *Health Communication*, *7*(22), 1–10.

Kim, S.-H., & Willis, A. (2007). Talking about obesity: News framing of who is responsible for causing and fixing the problem. *Journal of Health Communication*, *12*(4), 359–376.

King, A. J. (2015). A content analysis of visual cancer information: prevalence and use of photographs and illustrations in printed health materials. *Health Communication*, *30*(7), 722–731.

Klin, A., & Lemish, D. (2008). Mental disorders stigma in the media: Review of studies on production, content, and influences. *Journal of Health Communication*, *13*(5), 434–449.

Kline, K. N. (2006). A decade of research on health content in the media: The focus on health challenges and sociocultural context and attendant informational and ideological problems. *Journal of Health Communication*, *11*(1), 43–59.

Krakow, M., & Rogers, B. (2016). Collateral damage and critical turning points: public health implications of HPV vaccine news coverage for boys and men in 2011. *Health Communication*, *31*(9), 1081–1088.

Latimer, A. E., Rench, T. A., Rivers, S. E., Katulak, N. A., Materese, S. A., Cadmus, L., . . . Salovey, P. (2008). Promoting participation in physical activity using framed messages: An application of prospect theory. *British Journal of Health Psychology*, *13*(Pt 4), 659–681.

Lee, N. Y., & McElroy, K. (2019). Online comments: The nature of comments on health journalism. *Computers in Human Behavior*, *92*, 282–287.

Link, E. (2019). Gesundheitskommunikation mittels Gesundheitsportalen und Online-Communitys: [Health communication with health portals and online-communities]. In C. Rossmann & M. R. Hastall (Eds.), *Handbuch der Gesundheitskommunikation: Kommunikationswissenschaftliche Perspektiven*. Wiesbaden: Springer.

LoRusso, S. (2017). *Beyond the" Angelina effect": A longitudinal analysis of celebrity breast cancer disclosures' impact on news media and public breast cancer information seeking outcomes* (Dissertation). University OF Minnesota. Retrieved from https://conservancy.umn.edu/bitstream/handle/11299/190533/LoRusso_umn_0130E_18412.pdf?sequence=1&isAllowed=y.

Lundell, H., Niederdeppe, J., & Clarke, C. (2013). Public views about health causation, attributions of responsibility, and inequality. *Journal of Health Communication*, *18*(9), 1116–1130.

Ma, Z. (2017). How the media cover mental illnesses: a review. *Health Education*, *117*(1), 90–109.

Madden, K., Nan, X., Briones, R., & Waks, L. (2012). Sorting through search results: A content analysis of HPV vaccine information online. *Vaccine*, *30*(25), 3741–3746.

Malecki, S. L., Quinn, K. L., Zilbert, N., Razak, F., Ginsburg, S., Verma, A. A., & Melvin, L. (2019). Understanding the use and perceived impact of a medical podcast: Qualitative study. *JMIR Medical Education*, *5*(2).

Manganello, J., & Blake, N. (2010). A study of quantitative content analysis of health messages in US media from 1985 to 2005. *Health Communication*, *25*(5), 387–396.

Matthes, J. (2014). *Framing*. Baden-Baden: Nomos.

Mays, D., & Evans, W. D. (2017). The effects of gain-, loss-, and balanced-framed messages for preventing indoor tanning among young adult women. *Journal of Health Communication*, *22*(7), 604–611.

McGinty, E. E., Webster, D. W., Jarlenski, M., & Barry, C. L. (2014). News media framing of serious mental illness and gun violence in the United States, 1997-2012. *American Journal of Public Health*, *104*(3), 406–413.

Meadows, C. Z. (2017). A content analysis of publication trends in Internet-focused healthcare communication research: A look at the past and potential future of the field. *Journal of Healthcare Communications*, *02*(03).

Nazione, S., Pace, K., Russell, J., & Silk, K. (2013). A 10-year content analysis of original research articles published in Health Communication and Journal Of Health Communication (2000-2009). *Journal of Health Communication*, *18*(2), 223–240.

Niederdeppe, J., Lee, T., Robbins, R., Kim, H. K., Kresovich, A., Kirshenblat, D., … Fowler, E. F. (2014). Content and effects of news stories about uncertain cancer causes and preventive behaviors. *Health Communication*, *29*(4), 332–346.

O'Hara, S. K., & Smith, K. C. (2007). Presentation of eating disorders in the news media: What are the implications for patient diagnosis and treatment? *Patient Education and Counseling*, *68*(1), 43–51.

Park, P., Simmons, R. K., Prevost, T. A., & Griffin, S. J. (2010). A randomized evaluation of loss and gain frames in an invitation to screening for type 2 diabetes. *Journal of Health Psychology*, *15*(2), 196–204.

Reifegerste, D., Oelschlägel, F., & Schumacher, M.-B. (2014). Copy Factories im Gesundheitsjournalismus? Medienresonanzanalyse einer Krankenkasse [Copy factories in health journalism? Media resonance analysis of a statutory health insurance]. In V. Lilienthal, D. Reineck, & T. Schnedler (Eds.), *Qualität im Gesundheitsjournalismus* (pp. 159–172). Wiesbaden: Springer.

Rogers, E. M. (1996). The field of health communication today: An up-to-date report. *Journal of Health Communication*, *1*(1), 15–24.

Rössler, P. (2019). Agenda-Setting-Effekte im Gesundheitsbereich [Agenda-setting effects in the health sector]. In C. Rossmann & M. R. Hastall (Eds.), *Handbuch der Gesundheitskommunikation: Kommunikationswissenschaftliche Perspektiven*. Wiesbaden: Springer.

Ruhrmann, G., & Guenther, L. (2014). Medienberichterstattung über Gesundheitsrisiken: [Media coverage about health risks]. In K. Hurrelmann & E. Baumann (Eds.), *Handbuch Gesundheitskommunikation* (pp. 184–194). Bern: Verlag Hans Huber.

Ruhrmann, G., Guenther, L., Kessler, S. H., & Milde, J. (2015). Frames of scientific evidence: How journalists represent the (un)certainty of molecular medicine in science television programs. *Public Understanding of Science (Bristol, England)*, *24*(6), 681–696.

Ruhrmann, G., Milde, J., & Zillich, A. F. (Eds.) (2011). *Molekulare Medizin und Medien: Zur Darstellung und Wirkung eines kontroversen Wissenschaftsthemas* [Molecular medicine and media: about the coverage and ethics of a controversial science topics]. Wiesbaden: Springer.

Schäfer, M., Reifegerste, D., & Quiring, O. (2016). Die mediale Diskussion zu medizinischen und ethischen Aspekten des pharmakologischen Neuroenhancements: [The discussion of medical and ethical aspects in the media of pharmalogical neuroenhancement]. In A.-L. Camerini, R. Ludolph, & F. B. Rothenfluh (Eds.), *Gesundheitskommunikation im Spannungsfeld zwischen Theorie und Praxis* (pp. 42–52). Baden-Baden: Nomos.

Scherer, H., & Link, E. (2019). Gesundheitsthemen in den Medien: [Health issues in the media]. In C. Rossmann & M. R. Hastall (Eds.), *Handbuch der Gesundheitskommunikation: Kommunikationswissenschaftliche Perspektiven*. Wiesbaden: Springer.

Scherr, S. (2019). Psychische Krankheiten in der Gesellschaft und in den Medien [Psychological diseases in society and in the media]. In C. Rossmann & M. R. Hastall (Eds.), *Handbuch der Gesundheitskommunikation: Kommunikationswissenschaftliche Perspektiven*. Wiesbaden: Springer.

Schwartz, L. M., Woloshin, S., Andrews, A., & Stukel, T. A. (2012). Influence of medical journal press releases on the quality of associated newspaper coverage: retrospective cohort study.

Schwitzer, G. (2008). How do US journalists cover treatments, tests, products, and procedures? An evaluation of 500 stories. *PLoS Medicine*, *5*(5).

Schwitzer, G. (2017). Pollution of health news. *BMJ (Clinical Research Ed.)*, *356*.

Semetko, H. A., & Valkenburg, P. M. V. (2000). Framing European politics: A content analysis of press and television news. *Journal of Communication*, *50*(2), 93–109.

Serong, J., Lang, B., & Wormer, H. (2019). Wissenschaftskommunikation im Gesundheitsbereich: [Science communication in the health sector]. In C. Rossmann & M. R. Hastall (Eds.), *Handbuch der Gesundheitskommunikation: Kommunikationswissenschaftliche Perspektiven* (pp. 1–12). Wiesbaden: Springer.

Sooyoung Cho (2006). Network news coverage of breast cancer. *Journalism & Mass Communication Quarterly*, *83*(1), 116–130. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=cms&AN=21184754&site=ehost-live.

Srivastava, K., Chaudhury, S., Bhat, P. S., & Mujawar, S. (2018). Media and mental health. *Industrial Psychiatry Journal*, *27*(1), 1–5.

Stefanik-Sidener, K. (2013). Nature, nurture, or that fast food hamburger: Media framing of diabetes in the New York Times from 2000 to 2010. *Health Communication*, *28*(4), 351–358.

Stroobant, J. (2019). Finding the news and mapping the links: a case study of hypertextuality in Dutch-language health news websites. *Information, Communication & Society*, *22*(14), 2138–2155.

Sun, Y., Krakow, M., John, K. K., Liu, M., & Weaver, J. (2016). Framing obesity: How rews frames shape attributions and behavioral responses. *Journal of Health Communication*, *21*(2), 139–147.

Teixeira, R. A., Carlini, M., Jatoba-e-Sousa, A. C., Fernandes, P. T., Camargo, V. R., Vogt, C., & Li, L. M. (2012). Reporting on health-related research in two prestigious Brazilian newspapers. Clinics [online]. 2012, 67(3) // Reporting on health-related research in two prestigious Brazilian newspapers. *Clinics*, *67*(03), 261–264.

Vogel, D. L., Wade, N. G., & Haake, S. (2006). Measuring the self-stigma associated with seeking psychological help. *Journal of Counseling Psychology*, *53*(3), 325.

Walsh-Childers, K., Braddock, J., Rabaza, C., & Schwitzer, G. (2018). One step forward, one step back: Changes in news coverage of medical interventions. *Health Communication*, *33*(2), 174–187.

Wang, Xiu, & Shahzad (2019). Exploring the determinants of online health information-seeking behavior using a meta-analytic approach. *Sustainability*, *11*(17), 4604.

World Health Organization (1946). Constitution 22. July 1946. *Retrieved from:* https://www.who.int/about/who-we-are/constitution.

Wormer, H. (2011). Improving health care journalism. In G. Gigerenzer & J. A. Gray (Eds.), Better doctors, better patients, better decisions: Envisioning health care 2020 (pp. 169–188). Cambridge: The MIT Press.

Wormer, H. (2014). Medizin- und Gesundheitsjournalismus: [Medical and health journalism]. In K. Hurrelmann & E. Baumann (Eds.), *Handbuch Gesundheitskommunikation* (pp. 195–213). Bern: Verlag Hans Huber.

Yoo, J. H., & Kim, J. (2012). Obesity in the new media: a content analysis of obesity videos on YouTube. *Health Communication*, *27*(1), 86–97.

Zhang, Y., & Jin, Y. (2015). Who's responsible for depression? *The Journal of International Communication*, *21*(2), 204–225.

Zhang, Y., Jin, Y., Stewart, S., & Porter, J. (2016). Framing responsibility for depression: how U.S. news media attribute causal and problem-solving responsibilities when covering a major public health problem. *Journal of Applied Communication Research*, *44*(2), 118–135.

Prof. Dr. Doreen Reifegerste is a Professor for Health Communication at the School of Public Health at the Bielefeld University, Germany. She is an expert in Health Communication with a focus on social aspects of health communication.

Annemarie Wiedicke is a communication researcher at the Department of Media and Communication, University of Munich, and PhD candidate at the Department of Media and Communication Studies, University of Erfurt.


BY



Die Inhaltsanalyse im Forschungsfeld der Risikoberichterstattung

Senja Post und Jana Kim Wegner

1 Einleitung

Analysen der Risikoberichterstattung liegen in der Regel zwei Fragestellungen zugrunde: Wie angemessen ist die Darstellung von Risiken in den Medien und wie werden Risiken in den Medien konstruiert? Diese Fragestellungen überschneiden sich, sind aber nicht deckungsgleich. Die erste Fragestellung basiert auf der Voraussetzung, dass wissenschaftliche oder statistische Risikoinformationen vorliegen. Sie ergibt sich explizit oder implizit aus der Annahme, dass Mediendarstellungen wissenschaftlichen oder statistischen Informationen entsprechen können und sollen. Ziel solcher Studien ist es, zu prüfen, inwieweit die medialen Darstellungen von Risiken mit den wissenschaftlich oder statistisch verfügbaren Informationen übereinstimmen oder davon abweichen (z. B. Combs und Slovic 1979; Friedman et al. 1996; Kepplinger 1989; Kepplinger und Klimpe 2017; Ryan et al. 1991; Singer und Endreny 1987). Die zweite Fragestellung basiert auf der Feststellung, dass wissenschaftliche oder statistische Risikoinformationen nicht ausreichend vorliegen oder auf der Annahme, dass Vergleiche zwischen vorliegenden wissenschaftlichen Risikoinformationen und medialen Risikodarstellungen nicht zielführend sind. In solchen Studien werden Muster der Risikoberichterstattung unabhängig von verfügbaren wissenschaftlichen Risikoinformationen betrachtet (z. B. Bauer et al.

S. Post (✉)
Karlsruher Institut für Technologie (KIT), Karlsruhe, Deutschland
E-Mail: senja.post@kit.edu

J. K. Wegner
Wiesbaden, Deutschland

F. Oehmer-Pedrazzi et al. (Hrsg.), *Standardisierte Inhaltsanalyse in der Kommunikationswissenschaft – Standardized Content Analysis in Communication Research,* https://doi.org/10.1007/978-3-658-36179-2_17

1995; Bauer et al. 1996; Blair et al. 2015; Bräuer und Wolling 2014; Castelló 2010; Gaskell et al. 1999; Görke et al. 2000; Zeh und Odén 2014).

Die Berichterstattung über Risiken wurde am Beispiel zahlreicher Themen analysiert – zum Beispiel Gesundheit (Kepplinger und Klimpe 2017; Lewison 2008), Technologien (Bauer et al. 1995, 1996; Blair et al. 2015; Bräuer und Wolling 2014; Gaskell et al. 1999; Görke et al. 2000; Kepplinger 1989; Kepplinger und Lemke 2017; Singer und Endreny 1987; Zeh und Odén 2014), Umweltprobleme (Greenberg et al. 1989; Kepplinger 1989; Peters und Heinrichs 2005), Naturkatastrophen (Combs und Slovic 1979; Singer und Endreny 1993), Unfälle (Best 2000; Burns et al. 1993; Kepplinger und Hartung 1995; Kepplinger und Lemke 2014; Ryan et al. 1991; Wilkins und Patterson 1987) oder der Ausbreitung von Virusinfektionen wie SARS (Lewison 2008), Ebola (Sell et al. 2017) oder Zika (Ophir und Jamieson 2020). Einige dieser Untersuchungen sind Fallstudien (z. B. Kepplinger und Lemke 2017; Peters und Heinrichs 2005; Zeh und Odén 2014), andere analysieren fallübergreifend Muster der Risikoberichterstattung (Best 2000; Combs und Slovic 1979; Kepplinger 1989; Singer und Endreny 1987). Wieder andere Untersuchungen betrachten risikorelevante Informationen als Randaspekte umfassenderer Untersuchungsgegenstände wie die Berichterstattung über Wissenschaft, Umwelt, Gesundheit oder Technologien (z. B. Bauer et al. 1995, 1996; Bräuer und Wolling 2014; Gaskell et al. 1999).

2 Häufige Studiendesigns und Methodenkombinationen

Untersuchungen der Angemessenheit von Risikoberichterstattung basieren in der Regel auf Extra-Intra-Media-Vergleichen – also Vergleichen der Berichterstattung mit medienunabhängigen Daten oder Informationen (Rosengren 1970; Best 2000 zum Intra-Extra-Media-Vergleich im Speziellen). Häufig verwendete medienunabhängige Informationen sind wissenschaftliche Konstrukte, medienunabhängige Statistiken oder Expertenurteile.

Wissenschaftliche Konstrukte. Viele Extra-Intra-Media-Vergleiche gehen explizit oder implizit von dem versicherungstechnisch definierten Risikokonstrukt als Standard zur Beurteilung der Risikoberichterstattung aus. Mathematisch definiert handelt es sich bei einem Risiko um das Produkt aus der potentiellen Schadensgröße eines Ereignisses und seiner Eintrittswahrscheinlichkeit (Risiko = Schadensgröße * Eintrittswahrscheinlichkeit). So wird beispielweise das Risiko eines Medikaments zu bestimmten Nebenwirkungen ermittelt, indem die Nebenwirkungen (z. B. Kopfschmerzen, Thrombose usw.) und die Häufigkeit ihres Auftretens (z. B. „selten = weniger als einer Person von 100.000") vor der Zulassung in zahlreichen Untersuchungen dokumentiert werden. Ein Beispiel für die Verwendung des technischen Risikobegriffs als extra-medialen Vergleichsstandard der Berichterstattung ist eine Analyse der Berichterstattung über die Einnahmerisiken des Blutfettsenkers *Lipobay* des Herstellers *Bayer* (Kepplinger und Klimpe 2017). Anlass der Berichterstattung zur Jahrhundertwende waren wenige Todesfälle, zu denen es aufgrund der Einnahme des Medikaments gekommen war. Der Erstellung des

Messinstruments lag die Leitfrage zugrunde, welche Informationen erforderlich sind, um die wissenschaftlich vorliegenden, wissenschaftlich ermittelten Einnahmerisiken des Medikaments angemessen einschätzen zu können. Die AutorInnen unterschieden fünf Qualitätsniveaus der Berichterstattung: die *minimale Risikoinformation* führt die zentralen Begriffe des Lipobay-Vorfalls auf und verweist auf die Existenz tödlicher Einnahmerisiken; die *basale Risikoinformation* nennt über die minimale Risikoinformation hinaus die Anzahl der Toten weltweit oder im eigenen Land; die *ausreichende Risikoinformation* nennt über die basale Risikoinformation hinaus die Anzahl der Anwender weltweit oder im eigenen Land; die *suboptimale Risikoinformation* enthält über die ausreichende Risikoinformation hinaus Hinweise auf Todesursachen aufgrund von Überdosierungen und Wechselwirkungen mit anderen Medikamenten; die *optimale Risikoinformation* enthält über die suboptimale Risikoinformation hinaus Hinweise auf die Marktrücknahme des Medikaments. Ein ähnlicher Ansatz liegt der Studie von Ryan et al. (1991) zugrunde, die die Berichterstattung über eine Studie zur krebserregenden Wirkung von Koffein sowie über einen Atomreaktorunfall im Kernkraftwerk Ginna bei Ontario, New York, untersuchten. Die AutorInnen erfassten, ob in den Berichten Risiken genannt wurden, ob es generelle Verweise auf Risiken gab (z. B. „Koffein ist krebserregend") und/oder ob die Risiken quantifiziert wurden. Zudem erfassten sie, ob die Grundlagen – zum Beispiel die Rechenmethoden – der berichteten Risikoeinschätzungen transparent gemacht wurden. In anderen Studien wurde zudem erfasst, ob die Mediendarstellungen Vergleichsrisiken nannten – zum Beispiel das tödliche Risiko eines neuartigen Virus verglichen mit dem herkömmlichen Grippevirus (vgl. Friedman et al. 1996).

Ein weiterer, häufig verwendeter Standard, an der die Risikoberichterstattung gemessen wird, sind medien-externe Statistiken – zum Beispiel über die Häufigkeiten von Unfällen, Todes- oder Schadensfällen. Auch diese Analysen lehnen sich häufig explizit oder implizit an den technisch definierten Risikobegriff an. So vergleichen AutorInnen die Häufigkeit der Berichterstattung über bestimmte Schadensfälle mit der Häufigkeit ihres in statistischen Erhebungen erfassten Auftretens in der Realität. Solche Studien zeigen, dass die Medien sehr häufig über sehr seltene Schadensfälle oder Todesursachen berichten – ohne Hinweis darauf, dass die berichteten Ereignisse selten (also unwahrscheinlich) sind. Ein Beispiel ist eine Analyse der Berichterstattung über Todesursachen wie Herzkreislaufversagen, Naturkatastrophen, Unfälle usw. (Combs und Slovic 1979). Ein weiteres Beispiel für die Verwendung medien-externer Statistiken ist ein Vergleich der Berichterstattung über Umweltrisiken im Zeitverlauf mit offiziell verfügbaren langfristig erhobenen Werten der Luftverschmutzung, Wasserqualität usw. (Kepplinger 1989). Auch Singer und Endreny (1987) nutzen verschiedene medien-externe Daten, um die Qualität bzw. der Richtigkeit („accuracy") von Risikoinformationen in den Medien zu bestimmen. Grundlage ihrer Analyse ist die U.S. Berichterstattung über verschiedene Risikoquellen. Um die Qualität der Risikoinformation in Medienberichten zu bestimmen, erfassten die AutorInnen, ob bekannte

relevante Risikoinformationen genannt oder ausgelassen wurden (z. B. wichtige Studienergebnisse, Einschränkungen von Studienergebnissen, relevante methodische Details), ob Informationen fehlerhaft (z. B. durch Verweise auf falsche Quellen, falsche Zitate) und irreführend dargestellt wurden (z. B. Darstellung von Spekulationen als Fakten).

Eine weitere medien-externe Quelle, mit der die Medienberichterstattung über Risiken verglichen wurde, sind Expertenbefragungen. Zum Beispiel verglichen ForscherInnen die durch quantitative Inhaltsanalysen ermittelten Darstellungen der Risiken von Kernenergie in den Medien mit standardisierten, quantitativen Risikoeinschätzungen von WissenschaftlerInnen (Lichter et al. 1990). Mit solchen Untersuchungen kann eingeschätzt werden, inwieweit die in Medien dargestellten Risiken den in bestimmten Wissenschaftsdisziplinen vorherrschenden Einschätzungen entsprechen oder davon abweichen. Ein damit verwandtes Studiendesign sind sogenannte Akkuratheitsanalysen (accuracy studies, z. B. Blankenburg 1970; Charnley 1936; Pulford 1976). Ihnen liegt die Annahme zugrunde, dass WissenschaftlerInnen Risiken angemessen einschätzen und deshalb als Standard zur Beurteilung der Medienberichterstattung geeignet sind. In solchen Studien werden die in Medien zitierten Quellen oder ExpertInnen zu der Richtigkeit („accuracy“) von Medienberichten über Wissenschaft oder Risiken befragt. Da es sich bei diesen Untersuchungen aber nicht um standardisierte Inhaltsanalysen handelt, wird auf diese Studien hier nicht weiter eingegangen.

Eindeutige technische Bestimmungen von Risiken sind häufig nicht möglich. Das ist zum Beispiel dann der Fall, wenn potentielle unerwünschte Folgen einer medizinischen oder technologischen Anwendung und/oder ihre Häufigkeiten nicht hinlänglich bekannt sind. Das trifft zum Beispiel auf Anwendungen neuer Technologien zu. Über deren Neben- oder Langzeitwirkungen und die Häufigkeit ihres Auftretens außerhalb der kontrollierten, im Labor durchgeführten Zulassungsstudien ist zum Teil wenig bekannt. Viele Studien zur Darstellung von Technologien in den Medien untersuchen deshalb nicht die Angemessenheit der Risikodarstellungen im engeren Sinne, sondern allgemeine Muster der Risikoberichterstattung. Die inhaltsanalytischen Konstrukte und Messungen, die in solchen Untersuchungen angewandt werden, werden im Folgenden beschrieben.

3 Zentrale Konstrukte

Viele Analysen der Risikodarstellungen in den Medien zielen darauf, Schwerpunktsetzungen, Deutungsmuster und Bewertungen zu untersuchen. Hierzu werden berichtete Schadensarten kategorisiert, Frames identifiziert und Kosten/Nutzen-Aussagen erfasst.

1. Klassifikation von Risiken bzw. Schäden. Viele Untersuchungen der Berichterstattung über verschiedene Risiken stützen sich auf eine Gefahrenklassifikation von Hohenemser et al. (1983). Die AutorInnen kategorisieren Gefahren anhand von 12 Kategorien: Differenziert wird, 1.) ob eingesetzte Technologien, Stoffe oder

Materialien bestimmte Schäden erzielen sollen (z. B. Kriegstechnologien, Schädlingsbekämpfungsmittel); 2.) wie sich schadhafte Stoffe oder Materialien räumlich ausbreiten; 3.) wie freigesetzte schädliche Stoffe oder Materialien konzentriert oder dosiert waren; 4.) wie lange schädliche Stoffe oder Materialien freigesetzt wurden; 5.) wie häufig bestimmte Schäden aufgrund einer Gefahrenquelle auftraten; 6.) wie viele menschliche Todesopfer eine Gefahrenquelle gefordert hat; 7.) wie viele Todesopfer die wiederholte Gefahrenlage eines Typs maximal gefordert hat; 8.) wie viele Menschen aufgrund einer Gefahrenquelle gefährdet waren; 9.) wie lang die Existenz einer Gefahrenquelle und das erste Auftreten negativer Folgen zeitlich auseinanderlagen; 10.) wie hoch die nicht-menschliche Sterblichkeit bei potentiellen Schäden beziffert wurde; 11.) wie hoch die nicht-menschliche Sterblichkeit bei beobachteten Schäden beziffert wurde; 12.) inwieweit Schäden generationsübergreifende Eigenschaften hatten. Zahlreiche AutorInnen (Burns et al. 1993; Freudenburg et al. 1996; Singer und Endreny 1987) nutzen diese Klassifikation zur Analyse der Berichterstattung über Risiken, vielfach in modifizierter Form. Burns et al. (1993) untersuchten ergänzend, ob die erfassten Gefahrenquellen gesellschaftliche Einflüsse haben. Andere AutorInnen benutzten in Teilen differenziertere oder vereinfachte Analyseschemata. So unterschieden einige die untersuchten Technologien (z. B. Rankin und Nearley 1979), andere differenzierten die Todesursachen (z. B. Frost et al. 1997). Singer und Endreny (1990) reduzierten die Einteilung der Gefahrenquellen auf die Kategorien – Naturgefahren (z. B. Erdbeben), Aktivitäten mit Kosten und Nutzen (z. B. Alkoholkonsum; Extremsport), Energierisiken (z. B. Stromschläge), Materialrisiken (z. B. Asbest), komplexe Technologien (z. B. Prothesen) und Krankheiten (z. B. Pandemien).

2. Frames. Viele Untersuchungen von Risikodarstellungen basieren auf Inhaltsanalysen der Berichterstattung über Technologien. Einige Untersuchungen erfassen Frames, also Sichtweisen oder Perspektiven in der Berichterstattung über Risikotechnologien. Viele AutorInnen differenzieren zwischen positiv und negativ wertenden Frames (z. B. Fortschritts-, Wirtschafts- versus Ethik-, Natürlichkeits- und Unberechenbarkeitsframe („Pandorra's Box") in der Berichterstattung über Biotechnologien (z. B. Bauer et al. 1996; McKey et al. 2011). Frames spielen auch in Analysen der Berichterstattung über die Kosten und den Nutzen von Technologien eine Rolle, die im Folgenden beschrieben werden.
3. Kosten-Nutzen-Bewertung von Technologien. Ein häufig untersuchter Aspekt der Risikokonstruktion in der Berichterstattung ist das Verhältnis zwischen dargestellten potentiellen Schäden (Kosten) technologischer Anwendungen und ihren Vorteilen oder Gewinnen (Nutzen). Einige AutorInnen erfassten den Anteil von Medienberichten, die nur auf die Kosten, nur auf den Nutzen oder auf beides eingehen (z. B. Bauer et al. 1995, 1996; Blair et al. 2015; Gaskell et al. 1999; Görke et al. 2000; Singer und Endreny 1987, 1993; ähnlich auch Ranking und Nearley 1979; Zeh und Odén 2014). Blair et al. (2015) untersuchten zusätzlich, ob der Nutzen bzw. die Schäden als gewiss oder ungewiss dargestellt wurden. Mediendarstellungen des

Nutzens und der Schäden von Technologien wurden auch in Frame-Analysen erfasst. In einigen Untersuchungen wird erhoben, aus welcher Sicht Nutzen und Schäden dargestellt werden – zum Beispiel aus wirtschaftlicher, ökologischer oder gesundheitlicher Sicht (z. B. Blair et al., 2015; Bräuer und Wolling 2014; Castelló 2010; Zeh und Odén 2014).

4 Forschungsdesiderata

Frühe Untersuchungen der Risikoberichterstattung waren häufig von dem Anspruch getrieben, die Qualität oder sachliche Angemessenheit der Darstellung von Risiken in der Medienberichterstattung zu bestimmen. Dieser Ansatz wurde in späteren Analysen kritisiert. Einige AutorInnen argumentierten, dass die medien-externen Quellen, die als Vergleichsstandard zur Beurteilung der Quellen herangezogen werden, ebenso sozial konstruiert seien wie die Medieninhalte selbst und dass Analysen der Richtigkeit bzw. der sachlichen Angemessenheit von Mediendarstellungen deshalb nicht möglich seien (Schulz 1989; Kohring und Görke 2000).

In den vergangenen Jahren sind Diskussionen über die Richtigkeit oder Angemessenheit von Medieninhalten wieder aufgekommen, zum Beispiel in Diskussionen um irreführende oder gefälschte Meldungen („Fake News"), Verschwörungstheorien oder Desinformation (Scheufele und Krause 2019). Solche Debatten spielen vor allem in öffentlich politisierten Auseinandersetzungen um Umwelt, Technologien und Wissenschaft eine Rolle – zum Beispiel in den Debatten um Klimawandel, Evolution usw. (Iyengar und Massey 2019). Die Beschäftigung mit Desinformation verlangt systematische Verfahren, um die sachliche Angemessenheit von Kommunikationsinhalten bestimmen zu können und sachlich angemessenere von unangemesseneren Darstellungen zu unterscheiden. Hierzu sollten traditionelle Ansätze zur Bestimmung der sachlichen Angemessenheit von Kommunikationsinhalten wieder aufgenommen und weiterentwickelt werden.

Literatur

Bauer, M., Ragnarsdottir, A., Rudolfsdottir, A., & Durant, J. (1995). *Science and technology in the British press, 1946–1990: a systematic content analysis of the press.*

Bauer, M. W., Kohring, M., Allansdottir, A., & Gutteling, J. (1996). The dramatisation of biotechnology in elite mass media. *Biotechnology, 2000*, 35–52.

Best, S. (2000). Der Intra-Extra-Media-Vergleich—ein wenig genutztes Analyseinstrument und seine methodischen Anforderungen. *Publizistik, 45*(1), 51–69.

Blair, B. D., Weible, C. M., Heikkila, T., & McCormack, L. (2015). Certainty and uncertainty in framing the risks and benefits of hydraulic fracturing in the Colorado news media. *Risk, Hazards & Crisis in Public Policy, 6*(3), 290–307.

Blankenburg, W. B. (1970). News accuracy: Some findings on the meaning of errors. *Journal of Communication, 20*(4), 375–386.

Bräuer, M., & Wolling, J. (2014). *Veränderungen durch Fukushima? Die Medienberichterstattung über erneuerbare Energien im internationalen Vergleich.*

Burns, W. J., Slovic, P., Kasperson, R. E., Kasperson, J. X., Renn, O., & Emani, S. (1993). *Incorporating structural models into research on the social amplification of risk: Implications for theory construction and decision making. Risk analysis, 13*(6), 611–623.

Castelló, E. (2010). Framing news on risk industries: Local journalism and conditioning factors. *Journalism, 11*(4), 463–480.

Charnley, M. V. (1936). A study of newspaper accuracy. *Journalism and Mass Communication Quarterly, 13*(4), 394–401.

Combs, B., & Slovic, P. (1979). Newspaper coverage of causes of death. *Journalism quarterly, 56*(4), 837–849.

Freudenburg, W. R., Coleman, C. L., Gonzales, J., & Helgeland, C. (1996). Media coverage of hazard events: analyzing the assumptions. *Risk Analysis, 16*(1), 31–42.

Friedman, S. M., Villamil, K., Suriano, R. A., & Egolf, B. P. (1996). Alar and apples: Newspapers, risk and media responsibility. *Public Understanding of Science, 5*(1), 1–20.

Frost, K., Frank, E., & Maibach, E. (1997). Relative risk in the news media: a quantification of misrepresentation. *American Journal of Public Health, 87*(5), 842–845.

Gaskell, G., Bauer, M. W., Durant, J., & Allum, N. C. (1999). Worlds apart? The reception of genetically modified foods in Europe and the US. *Science, 285*(5426), 384–387.

Görke, A., Kohring, M., & Ruhrmann, G. (2000). Gentechnologie in der Presse. *Publizistik, 45*(1), 20–37.

Greenberg, M. R., Sachsman, D. B., Sandman, P. M., & Salomone, K. L. (1989). Network evening news coverage of environmental risk. *Risk Analysis, 9*(1), 119–126.

Hohenemser, C., Kates, R. W., & Slovic, P. (1983). The nature of technological hazard. *Science, 220*(4595), 378–384.

Iyengar, S., & Massey, D. S. (2019). Scientific communication in a post-truth society. *Proceedings of the National Academy of Sciences*, *116*(16), 7656–7661.

Kepplinger, H. M. (1989). Künstliche Horizonte: Folgen, Darstellung und Akzeptanz von Technik in der Bundesrepublik. Campus-Verlag.

Kepplinger, H. M., & Hartung, U. (1995). *Störfall-Fieber. Wie ein Unfall zum Schlüsselereignis einer Unfallserie wird.* Freiburg, München: Alber.

Kepplinger, H. M., & Klimpe, S. (2017). Medikamenten-Risiko und Informationsmöglichkeit von Zeitungslesern am Beispiel Lipobay. *Journalismus zwischen Autonomie und Nutzwert*, 155–174.

Kepplinger, H. M., & Lemke, R. (2014). *Framing Fukushima: zur Darstellung der Katastrophe in Deutschland im Vergleich zu Großbritannien, Frankreich und der Schweiz.*

Kohring, M., & Görke, A. (2000). Genetic engineering in the international media: an analysis of opinion-leading magazines. *New Genetics and Society*, *19*(3), 345–363.

Lewison, G. (2008). The reporting of the risks from severe acute respiratory syndrome (SARS) in the news media, 2003–2004. *Health, Risk and Society, 10*(3), 241–262.

Lichter, S. R., Rothman, S. & Lichter, L. (1990). *The media elite: America's new powerbrokers*. Hastings House Book Publishers.

McKay, F. H., Thomas, S. L., & Warwick Blood, R. (2011). 'Any one of these boat people could be a terrorist for all we know! 'Media representations and public perceptions of 'boat people' arrivals in Australia. *Journalism, 12*(5), 607–626.

Ophir, Y., & Jamieson, K. H. (2020). The effects of Zika virus risk coverage on familiarity, knowledge and behavior in the US–A time series analysis combining content analysis and a nationally representative survey. *Health communication, 35*(1), 35–45.

Peters, H. P., & Heinrichs, H. (2005). *Öffentliche Kommunikation über Klimawandel und Sturmflutrisiken: Bedeutungskonstruktion durch Experten, Journalisten und Bürger.* Forschungszentrum.

Pulford, D. L. (1976). Follow-up of study of science news accuracy. *Journalism and Mass Communication Quarterly*, *53*(1), 119

Rankin, W. L., & Nearley, S. M. (1979). *Comparative analysis of network television news coverage of nuclear power, coal, and solar stories* (No. PNL-2995). Battelle Human Affairs Research Center, Seattle, WA (USA).

Rosengren, K. E. (1970). International news: Intra and extra media data. *Acta Sociologica, 13*(2), 96–109.

Ryan, M., Dunwoody, S., & Tankard, J. (1991). Risk information for public consumption: print media coverage of two risky situations. *Health education quarterly, 18*(3), 375–390.

Scheufele, D. A., & Krause, N. M. (2019). Science audiences, misinformation, and fake news. *Proceedings of the National Academy of Sciences*, *116*(16), 7662–7669.

Schulz, W (1989). Massenmedien und Realität. Die „ptolemäische" und die „kopernikanische" Auffassung. In Kaase, M. & Schulz, W. (Hrsg.), *Massenkommunikation. Theorien, Methoden, Befunde* (S. 135–149). Opladen: Westdeutscher Verlag.

Sell, T. K., Boddie, C., McGinty, E. E., Pollack, K., Smith, K. C., Burke, T. A., & Rutkow, L. (2017). Media messages and perception of risk for Ebola virus infection, United States. *Emerging infectious diseases, 23*(1), 108.

Singer, E. (1990). A question of accuracy: How journalists and scientists report research on hazards. *Journal of Communication, 40*(4), 102–116.

Singer, B. E., & Endreny, P. (1987). Reporting hazards: Their benefits and costs. *Journal of Communication, 37*(3), 10–26.

Singer, E., & Endreny, P. M. (1993). *Reporting on risk: How the mass media portray accidents, diseases, other hazards.* Russell Sage Foundation.

Wilkins, L., & Patterson, P. (1987). Risk analysis and the construction of news. *Journal of communication, 37*(3), 80–92.

Zeh, R., & Odén, T. (2014). *Energieträger in der Berichterstattung: die Nachwehen von Fukushima in Schweden und Deutschland.*

Prof. Dr. Senja Post is a Professor of Science Communication at the Department of Agricultural Economics and Rural Development at the University of Göttingen (Germany). Her research focuses on Science Communication in political controversies.

Kim Wegner is a science communicator, she received her master's degree in Science Communication at UWE, Bristol (UK) after completing her bachelor's degree in physics at the University of Göttingen (Germany). Her research focuses on the accessibility of science, and physics specifically, to underserved audiences.


BY



Content Analysis in the Research Field of Environmental & Climate Change Coverage

Daniela Mahl und Lars Guenther

1 Introduction

Environmental communication has been defined as the "communication about the natural environment and ecosystem, commonly focusing on the relationships that human beings and their institutions maintain with the nonhuman natural environment" (Griffin and Dunwoody 2008, p. 1; cf. Hansen 2017, 2018). A large part of this communication—and especially media representations of the environment—deals with various environmental problems such as energy, pollution, extinction of species, the ozone hole, or population growth. In recent years, anthropogenic climate change in particular has become one of the defining topics in environmental communication (Hansen 2011, 2018; Moser and Dilling 2008). Climate change-related communication and media coverage is decisive for how people perceive this "unobtrusive" but highly pressing issue (Carvalho 2010, p. 172; Corbett and Durfee 2004). Most people do not experience climate change directly and its causes and effects lie beyond their everyday lives. However, media provide important access to scientific information, political and societal debates, risks of, and possible solutions to tackle climate change. As central arenas and actors "in the

D. Mahl (✉)
Universität Zürich, IKMZ - Institut für Kommunikationswissenschaft und Medienforschung, Zürich, Schweiz
E-Mail: d.mahl@ikmz.uzh.ch

L. Guenther
Universität Hamburg, JKW, Hamburg, Deutschland
E-Mail: lars.guenther@uni-hamburg.de

F. Oehmer-Pedrazzi et al. (Hrsg.), *Standardisierte Inhaltsanalyse in der Kommunikationswissenschaft – Standardized Content Analysis in Communication Research,* https://doi.org/10.1007/978-3-658-36179-2_18

production, reproduction, and transformation of the meanings" (Carvalho 2010, p. 172) of climate change, news coverage has significantly increased people's awareness of the problem over the years (Sampei and Aoyagi-Usui 2009). Both environmental and climate change-related communication and media coverage show intersections with various other research fields, such as health communication, communication focusing on controversial technologies such as genetic engineering or nanotechnology, risk communication, and, ultimately, science communication (Hansen 2011; Schäfer and Bonfadelli 2017).

In the late 1980s and early 1990s, media and communication research on the environment emerged from various research strands such as environmental psychology, environmental sociology, and environmental communication (for an overview, see Cox 2010; Hansen 2017, 2018; Hansen and Cox 2015). These analyses covered environmental crises and disasters as well as environmental journalists and their relationship to sources (e.g., Dunwoody 2019; Hansen 2018). In contrast, research on climate-related communication and media reporting has started in the early 1990s and increased significantly since the mid-2000s (Schäfer and Schlichting 2014). Over the course of the last two decades, research in the field of environmental communication has developed and diversified considerably (Hansen 2011): Whereas in the early years, studies of environmental coverage had a relatively narrow focus on specific environmental issues, disasters, or events, today research covers diverse topics from the fields of science, medicine, and health —with climate change being the most intensively researched area recently (e.g., Moser and Dilling 2008). Studies assessing media representations of climate change typically deal with questions such as whether media coverage differs between countries, how it develops over time, which topics are embedded in the climate discourse, which perspectives on climate change are covered, and how climate change is presented in textual or visual form (for an overview, see Metag 2016). Various meta-analyses and literature reviews outlined important trends synthesizing the development of the research field (e.g., Anderson 2009; Carvalho 2010; Metag 2016; Moser 2010; Schäfer 2012; Schäfer and Schlichting 2014). Results of these studies show three main trends. First, media coverage of climate change has increased over the last decades (Liu et al. 2011; Schäfer and Schlichting 2014; Schmidt et al. 2013)—albeit there are significant differences in media attention across countries as well as differences in the amount of climate change-related coverage between media outlets (e.g., Hase et al. 2021; Schmidt et al. 2013). Second, the field of research has diversified: Content analyses have examined numerous countries and diverse continents (however with a clear bias towards Western, Anglophone countries; for an overview, see Eide and Kunelis 2012; Eide et al. 2010; Schäfer and Schlichting 2014); also more and more different media types were considered (Metag 2016). Thirdly, the thematic focus of climate change communication has shifted. While in the early 1990s anthropogenic climate change was mainly discussed from a scientific perspective, today political, economic, and social aspects are important issues in media coverage (Anderson 2011;

Ivanova 2017). Since most research in environmental communication is dominated by research into climate change communication, this chapter will put emphasis on the latter, implying that climate change communication provides a good proxy for environmental communication overall (see Hansen 2011, 2018; Moser and Dilling 2008).

2 Common Research Designs and Combinations of Methods

Literature reviews of climate change-related media coverage show that studies apply a variety of methods and research designs, including qualitative and quantitative content analysis—both are equally well represented in the literature and remain constant over time. Only few studies combine both research strategies (Schäfer and Schlichting 2014). Case studies, typically focusing on media coverage in a specific national context, have increasingly been replaced by cross-sectional studies that compare different countries or media, as well as longitudinal studies that analyze the development of media coverage over time (Guenther et al. 2022; Metag 2016). Only a few publications combine cross-sectional and longitudinal elements in one study (Schäfer and Schlichting 2014).

More recently, studies have investigated online climate change communication, for example in social networks (e.g., Kirilenko and Stepchenkova 2014) or blogs (e.g., Fløttum et al. 2014). In order to analyze climate-related online communication, automated content analysis is often used, due to the large amounts of available data. Typical approaches of computational content analysis are text mining and dictionary approaches (e.g., Ivanova 2017). Recently, probabilistic topic modelling with latent Dirichlet allocation (LDA) has also been applied as a form of unsupervised machine learning. LDA models use algorithms to identify latent thematic structures in large text corpora based on word occurrence and distribution (e.g., Hase et al. 2021; Keller et al. 2020; Kirilenko and Stepchenkova 2014). Most content analyses, however, still employ human coding (Metag 2016).

Various researchers use content analysis in combination with other methods. For example, studies combine manual content analysis with representative survey data (e.g., Feldman et al. 2012) to understand the relationship between the content of climate change coverage and the beliefs about global warming of the recipients. Furthermore, studies have combined manual content and social network analysis in order to investigate online communication about climate change between polarized groups (e.g., Williams et al. 2015).

3 Main Constructs Employed in Media Content Analyses

Existing research on media representations of climate change reveals diverse research subjects and issues, thus demonstrating that the analytical spectrum has expanded compared to early research. First, the studies have analyzed more and more different

countries. Overall, European countries such as Germany (e.g., Schäfer 2016), Denmark (e.g., Eskjær 2016) or Switzerland (e.g., Bonfadelli 2016) received the largest share of scholarly attention. North American countries' media coverage of climate change is analyzed almost as frequently as that of European countries (for the United States, see Boykoff and Boykoff 2004; for Canada, see Young and Dugas 2012). In contrast, Asian countries—India, the Middle East, China, Japan—received as little scholarly attention as Latin American or African countries. As countries of the Global South are significantly under-researched but often more affected by the impacts of climate change, their media coverage has recently been increasingly analyzed (for India, see Billett 2010; for Brazil, see Painter and Ashe 2012). Second, researchers have studied more and more media, such as climate change coverage in print media (for elite press coverage, see Billett 2010; for tabloids, see Boykoff 2008) or on TV (e.g., Boykoff 2007; Painter 2011) as well as social media depictions of climate change (e.g., Tandoc and Eng 2016).

Despite this diversity of the research field, the following common analytical constructs can be identified:

1. *The overall amount of climate change-related coverage:* Several studies, mostly single-country case studies, focusing almost exclusively on industrialized countries, have explored the amount of climate change-related coverage. Individual studies have examined **media attention** for climate change in countries such as the United States (e.g., Boykoff and Boykoff 2007), Australia (e.g., Farbotko 2005), Canada (e.g., Ahchong and Dodds 2012), Germany (e.g., Weingart et al. 2000), France (e.g., Brossard et al. 2004), the UK (e.g., Carvalho and Burgess 2005), and China (e.g., Yang 2010). Comparative studies mostly cover industrialized nations, though emerging economies or non-industrialized countries are also examined (e.g., Corfee-Morlot et al. 2007; Hase et al. 2021; Schmidt et al. 2013). Both individual and comparative studies have shown that media attention for climate change has increased in many countries since the mid-2000s.
2. *The representation of different actors or sources in media reporting:* Research so far has identified the common actors in reporting on climate change. Much focus has been on climate change advocates compared to climate skeptics (e.g., Metag 2016; Painter 2011). The discourse usually involves scientists, (transnational) institutions such as the Intergovernmental Panel on Climate Change (IPCC) and the United Nations Framework Convention on Climate Change (UNFCCC), politicians and especially green parties, (conservative) think tanks, non-governmental organizations (NGOs) such as Greenpeace, celebrities or prominent activists, news agencies, but also industrial actors like Exxon Mobil or Shell (e.g., Anderson 2009; Schäfer 2015; Schäfer and O'Neill 2016; Schlichting 2013; Schmidt et al. 2013). In early years of the debate, the lobbyist group Global Climate Coalition also appeared frequently. Researching different actors and their viewpoints is important as they all actively seek to establish their particular perspectives on the issue. Media attention for climate

change has strongly fluctuated over time and peaked around specific events (e.g., Hase et al. 2021; Schäfer 2015). Hence, research regarding the sources of media reporting has extensively tried to identify what triggers media coverage about climate change. Scholars have concluded that international events (climate summits, such as the Conferences of the Parties (COPs) to the UNFCCC), scientific reports such as the IPCC assessment reports, NGO public relations efforts, extreme weather events, but also concerts and movies (e.g., An Inconvenient Truth) are substantial drivers of media attention (e.g., Anderson 2009; Moser 2010; Schäfer 2012; Schäfer et al. 2014; Schäfer & Schlichting, 2014). Peaks during COPs are probably related to the high stakes and the prominent political actors involved in the international negotiations (Schmidt et al. 2013).

3. *The framing of climate change:* Respective studies have analyzed how climate change is presented in news coverage or policy papers, which aspects are emphasized, or which responsibilities and possible solutions are derived. Studies have examined, for example, how stakeholders—scientists, industry, policymakers, non-governmental organizations (NGOs)—communicate their positions on climate change or which aspects and perspectives of climate change journalists select for media coverage (for an overview, see Schäfer 2016; Schäfer and O'Neill 2016; Schlichting 2013). In her meta-analysis of industry actors' climate change communication, Schlichting (2013) identified three successive phases over time, each characterized by a dominant master frame: scientific uncertainty of climate change (early to mid-1990s), socio-economic consequences of mandatory emission reductions (1997 to early 2000s), and industrial leadership in climate protection (since mid-2000s). Engesser and Brüggemann (2016), in turn, focused on journalists' **framing** of climate change and identified five frames: industrialized countries' economic policies, sustainability, technological optimism, emerging economies' responsibility, and global ecological discourse. In contrast to studies that have investigated the framing of climate change by stakeholders and journalists, a larger number of framing analyses focused on media coverage; hence, media frames. In addition to formal-stylistic frames, most scholars have examined issue-specific or topical content-oriented frames in climate change reporting, such as the generic frames conflict, human interest, responsibility, morality, Pandora's box and economic consequences (e.g., Dirikx and Gelders 2010), or they have identified issue-specific frames (Billett 2010; Engesser and Brüggemann 2016; for an overview, see Schäfer and O'Neill 2016).
4. *Uncertainty in climate change coverage:* Although scientific uncertainty accompanies all scientific issues and thus also climate change, in climate change communication uncertainty deserves special notice. Discussing the uncertainty of climate change research, sometimes even referred to as the 'scientific uncertainty frame' (Schlichting 2013), was sponsored by industrial actors such as those from fossil fuel companies, conservative parties and organizations to highlight points where scientists disagree and to cast doubt (Metag 2016). As a consequence, the existence and the anthropogenic origin of global warming were (and in some cases are still)

publicly questioned. Based on the journalistic norm of **balance,** different viewpoints were often represented in the media as if both sides were equally valid (Boykoff and Boykoff 2004) and accordingly journalistic reporting amplified uncertainty even more and encouraged political inaction (Anderson 2009; Moser 2010). Recent studies do not find this kind of balanced reporting anymore.

5. *Visual representations of climate change:* Scholarly interest in the visualization of climate change has grown over the last years (e.g., Guenther et al. 2022). These studies focused mainly on traditional media coverage in newspapers, newsmagazines and on television. Online content or fictional and entertainment formats, however, are rarely examined (for an overview, see Metag et al. 2016; O'Neill and Smith 2014). Content analysis studies of climate change imagery have explored a variety of visual themes, such as visual representations of impacts, threats, and causes of climate change (e.g., Lester and Cottle 2009), (untouched) nature (e.g., Rebich-Hespanha et al. 2015), (well-known) individuals (e.g., O'Neill et al. 2013), graphics and models (e.g., Schneider 2012), and carbon emissions and energy issues (e.g., Rebich-Hespanha et al. 2015). Visual representations of climate change have been analyzed for different countries (for Canada, see DiFrancesco and Young 2011; for comparative analysis of newspaper imagery, see O'Neill 2013; for the UK, see Smith and Joffe 2009). These studies have revealed that similar images are often used in climate change coverage across different countries and media outlets.

4 Research Desiderata

Future researchers interested in climate change coverage could work on the following common points of criticism regarding recent research in this area (e.g., Anderson 2009; Metag 2016; Moser 2010; Schäfer 2012, 2015; Schäfer and O'Neill 2016): First, the scope of comparative studies needs to be expanded, especially in terms of countries (e.g., the Global South), media (e.g., there is a lack of research on television as well as fictional media and popular culture), time frames, focus (text vs. visuals, multimodality), and respective indicators; second, there needs to be more research on social media (e.g., not just Twitter) and online media such as blogs; third, methodologically, automated content analyses will allow to work with larger text corpora; lastly, fourth, more mixed-methods research is recommended to include more points of the climate change communication cycle, for instance, combining content analysis with audience research (Feldman et al. 2012), and especially regarding long-term effects of media exposure. So far, research on environmental communication has primarily focused on the sub-theme of climate change, therefore future research should address other environmental problems, such as energy or pollution, as well (Hansen 2018; Moser and Dilling 2008).

Relevant Variables in DOCA – Database of Variables for Content Analysis

Balance: https://doi.org/10.34778/2o
Generic frames: https://doi.org/10.34778/2p
Issue attention: https://doi.org/10.34778/2q

References

Ahchong, K., & Dodds, R. (2012). Anthropogenic climate change coverage in two Canadian newspapers, the Toronto Star and the Globe and Mail, from 1988 to 2007. *Environmental Science & Policy, 15*(1), 48–59.

Anderson, A. (2009). Media, politics and climate change: Towards a new research agenda. *Sociology Compass, 3*(2), 166–182.

Anderson, A. (2011). Sources, media, and modes of climate change communication: The role of celebrities. *Wiley Interdisciplinary Reviews: Climate Change, 2*(4), 535–546.

Billett, S. (2010). Dividing climate change: global warming in the Indian mass media. *Climatic Change, 99*(1–2), 1–16.

Bonfadelli, H. (2016). Climate change communication in Switzerland. In E. C. Tandoc & N. Eng (Eds.), *Oxford research encyclopedias.* Oxford: Oxford University Press.

Boykoff, M. T. (2007). From convergence to contention: United States mass media representations of anthropogenic climate change science. *Transactions of the Institute of British Geographers, 32*(4), 477–489.

Boykoff, M. T. (2008). The cultural politics of climate change discourse in UK tabloids. *Political Geography, 27*(5), 549–569.

Boykoff, M. T., & Boykoff, J. M. (2004). Balance as bias: Global warming and the US prestige press. *Global Environmental Change, 14*(2), 125–136.

Boykoff, M. T., & Boykoff, J. M. (2007). Climate change and journalistic norms: A case-study of US mass-media coverage. *Geoforum, 38*(6), 1190–1204.

Brossard, D., Shanahan, J., & McComas, K. (2004). Are issue-cycles culturally constructed? A comparison of French and American coverage of global climate change. *Mass Communication and Society, 7*(3), 359–377.

Carvalho, A. (2010). Media(ted)discourses and climate change: A focus on political subjectivity and (dis)engagement. *Wiley Interdisciplinary Reviews: Climate Change, 1*(2), 172–179.

Carvalho, A., & Burgess, J. (2005). Cultural circuits of climate change in U.K. Broadsheet newspapers, 1985–2003. *Risk Analysis: An Official Publication of the Society for Risk Analysis, 25*(6), 1457–1469.

Corbett, J. B., & Durfee, J. L. (2004). Testing public (un)certainty of science. *Science Communication, 26*(2), 129–151.

Corfee-Morlot, J., Maslin, M., & Burgess, J. (2007). Global warming in the public sphere. Philosophical transactions. *Series A, Mathematical, Physical, and Engineering Sciences, 365*(1860), 2741–2776.

Cox, R. (2010). *Environmental communication and the public sphere*. Thousand Oaks, Calif.: Sage Publ.

DiFrancesco, A. D., & Young, N. (2011). Seeing climate change: The visual construction of global warming in Canadian national print media. *Cultural Geographies, 18*(4), 517–536.

Dirikx, A., & Gelders, D. (2010). To frame is to explain: A deductive frame-analysis of Dutch and French climate change coverage during the annual UN conferences of the parties. *Public Understanding of Science,* 19(6), 732–742.

Dunwoody, S. (2019). Environment, health, and science coverage. In T. P. Vos & F. Hanusch (Eds.), *Wiley Blackwell-ICA international encyclopedias of communication. The international encyclopedia of journalism studies* (Vol. 19, pp. 1–9). Hoboken, NJ: Wiley-Blackwell.

Eide, E., & Kunelis, R. (Eds.) (2012). *Media meets climate: The global challenge for journalism.* Göteborg: Nordicom.

Eide, E., Kunelius, R., & Kumpu, V. (Eds.) (2010). *Global journalism research series: Vol. 3. Global climate - local journalisms: A transnational study of how media make sense of climate summits.* Bochum: Projekt-Verl.

Engesser, S., & Brüggemann, M. (2016). Mapping the minds of the mediators: The cognitive frames of climate journalists from five countries. *Public Understanding of Science*, 25(7).

Eskjær, M. F. (2016). Climate change communication in Denmark. In E. C. Tandoc & N. Eng (Eds.), *Oxford research encyclopedias.* Oxford: Oxford University Press.

Farbotko, C. (2005). Tuvalu and climate change: Constructions of environmental displacement in the Sydney morning herald. *Human Geography, 87*(4), 279–293.

Feldman, L., Maibach, E. W., Roser-Renouf, C., & Leiserowitz, A. (2012). Climate on cable: The nature and impact of global warming coverage on Fox News, CNN, and MSNBC. *The International Journal of Press/Politics, 17*(1), 3–31.

Fløttum, K., Gjesdal, A. M., Gjerstad, Ø., Koteyko, N., & Salway, A. (2014). Representations of the future in English language blogs on climate change. *Global Environmental Change, 29,* 213–222.

Griffin, R. J., & Dunwoody, S. (2008). Environmental communication. In W. Donsbach (Ed.), *The international encyclopedia of communication* (Vol. 38, p. 173). John Wiley & Sons Incorporated.

Guenther, L., Brüggemann, M., & Elkobros, S. (2022). From global doom to sustainable solutions: International news magazines' multimodal framing of our future with climate change. *Journalism Studies, 23*(1) 131–148.

Hansen, A. (2011). Communication, media and environment: Towards reconnecting research on the production, content and social implications of environmental communication. *International Communication Gazette, 73*(1–2), 7–25.

Hansen, A. (2017). Media representation: Environment. In P. Rössler, C. A. Hoffner, & L. van Zoonen (Eds.), *The Wiley Blackwell-ICA international encyclopedias of communication. The international encyclopedia of media effects* (Vol. 7, pp. 1–12). Chichester, West Sussex, Malden, MA: John Wiley & Sons, Inc.

Hansen, A. (2018). Environmental communication. In R. L. Heath, W. Johansen, J. Falkheimer, K. Hallahan, J. Raupp, & B. Steyn (Eds.), *The Wiley Blackwell-ICA international encyclopedias of communication. The international encyclopedia of strategic communication* (pp. 1–10). Hoboken, NJ: Wiley.

Hansen, A., & Cox, R. (2015). *The Routledge handbook of environment and communication.* London: Routledge.

Hase, V., Mahl, D., Schäfer, M. S., & Keller, T. R. (2021). Climate change in news media across the globe: An automated analysis of issue attention and themes in climate change coverage in 10 countries (2006–2018). *Global Environmental Change* https://doi.org/70102353-10.1016/j.gloenvcha.2021.102353.

Ivanova, A. (2017). *Transnationalisierung von Öffentlichkeiten* [Transnationalization of public spheres]. Wiesbaden: Springer Fachmedien Wiesbaden.

Keller, T. R., Hase, V., Thaker, J., Mahl, D., & Schäfer, M. S. (2020). News media coverage of climate change in India 1997–2016: Using automated content analysis to assess themes and topics. *Environmental Communication, 14*(2), 219–235.

Kirilenko, A. P., & Stepchenkova, S. O. (2014). Public microblogging on climate change: One year of Twitter worldwide. *Global Environmental Change, 26,* 171–182.

Lester, L., & Cottle, S. (2009). Visualizing climate change: Television news and ecological citizenship. *International Journal of Communication, 3*, 920–936.

Liu, X., Lindquist, E., & Vedlitz, A. (2011). Explaining media and congressional attention to global climate change, 1969-2005: An empirical test of agenda-setting theory. *Political Research Quarterly, 64*(2), 405–419.

Metag, J. (2016). Content analysis in climate change communication. In E. C. Tandoc & N. Eng (Eds.), *Oxford research encyclopedias.* Oxford: Oxford University Press.

Metag, J., Schäfer, M. S., Füchslin, T., Barsuhn, T., & Kleinen-von Königslöw, K. (2016). Perceptions of climate change imagery. *Science Communication, 38*(2), 197–227.

Moser, S. C. (2010). Communicating climate change: History, challenges, process and future directions. Wiley *Interdisciplinary Reviews: Climate Change, 1*(1), 31–53.

Moser, S. C., & Dilling, L. (Eds.) (2008). *Creating a climate for change: Communicating climate change and facilitating social change.* Cambridge: Cambridge Univ. Press.

O'Neill, S. J. (2013). Image matters: Climate change imagery in US, UK and Australian newspapers. *Geoforum, 49,* 10–19.

O'Neill, S. J., Boykoff, M., Niemeyer, S., & Day, S. A. (2013). On the use of imagery for climate change engagement. *Global Environmental Change, 23*(2), 413–421.

O'Neill, S. J., & Smith, N. (2014). Climate change and visual imagery. *Wiley Interdisciplinary Reviews: Climate Change, 5*(1), 73–87.

Painter, J. (2011). *Poles apart.* The international reporting of climate scepticism: Reuters Institute for the Study of Journalism.

Painter, J., & Ashe, T. (2012). Cross-national comparison of the presence of climate scepticism in the print media in six countries, 2007–10. *Environmental Research Letters, 7*(4).

Rebich-Hespanha, S., Rice, R. E., Montello, D. R., Retzloff, S., Tien, S., & Hespanha, J. P. (2015). Image themes and frames in US print news stories about climate change. *Environmental Communication, 9*(4), 491–519.

Sampei, Y., & Aoyagi-Usui, M. (2009). Mass-media coverage, its influence on public awareness of climate-change issues, and implications for Japan's national campaign to reduce greenhouse gas emissions. *Global Environmental Change, 19*(2), 203–212.

Schäfer, M. S. (2012). Online communication on climate change and climate politics: a literature review. *Wiley Interdisciplinary Reviews: Climate Change, 3*(6), 527–543.

Schäfer, M. S. (2015). Climate change and the media. In J. D. Wright (Ed.), *International Encyclopedia of the Social & Behavioral Sciences* (2nd ed., pp. 853–859). Amsterdam: Elsevier.

Schäfer, M. S. (2016). Climate change communication in Germany. In E. C. Tandoc & N. Eng (Eds.), *Oxford research encyclopedias.* Oxford: Oxford University Press.

Schäfer, M. S., & Bonfadelli, H. (2017). Umwelt- und Klimawandelkommunikation [Environmental and climate change communication]. In H. Bonfadelli (Ed.), *Forschungsfeld Wissenschaftskommunikation* [The field of science communication] (pp. 315–338). Wiesbaden: Springer VS.

Schäfer, M. S., Ivanova, A., & Schmidt, A. (2014). What drives media attention for climate change? Explaining issue attention in Australian, German and Indian print media from 1996 to 2010. *International Communication Gazette, 76*(2), 152–176.

Schäfer, M. S., & O'Neill, S. (2016). Frame analysis in climate change communication. In E. C. Tandoc & N. Eng (Eds.), *Oxford research encyclopedias.* Oxford: Oxford University Press.

Schäfer, M. S., & Schlichting, I. (2014). Media representations of climate change: A meta-analysis of the research field. *Environmental Communication, 8*(2), 142–160.

Schlichting, I. (2013). Strategic framing of climate change by industry actors: A meta-analysis. *Environmental Communication, 7*(4), 493–511.
Schmidt, A., Ivanova, A., & Schäfer, M. S. (2013). Media attention for climate change around the world: A comparative analysis of newspaper coverage in 27 countries. *Global Environmental Change, 23*(5), 1233–1248.
Schneider, B. (2012). Climate model simulation visualization from a visual studies perspective. Wiley Interdisciplinary Reviews: *Climate Change, 3*(2), 185–193.
Smith, N. W., & Joffe, H. (2009). Climate change in the British press: The role of the visual. *Journal of Risk Research, 12*(5), 647–663.
Tandoc, E. C., & Eng, N. (2016). Climate change communication on Facebook, Twitter, Sina Weibo, and other social media platforms. In E. C. Tandoc & N. Eng (Eds.)*, Oxford research encyclopedias*. Oxford: Oxford University Press.
Weingart, P., Engels, A., & Pansegrau, P. (2000). Risks of communication: Discourses on climate change in science, politics, and the mass media. *Public Understanding of Science, 9*(3), 261–283.
Williams, H. T.P., McMurray, J. R., Kurz, T., & Hugo Lambert, F. (2015). Network analysis reveals open forums and echo chambers in social media discussions of climate change. *Global Environmental Change, 32*, 126–138.
Yang, G. (2010). Brokering environment and health in China: Issue entrepreneurs of the public sphere. *Journal of Contemporary China, 19*(63), 101–118.
Young, N., & Dugas, E. (2012). Comparing climate change coverage in Canadian, English and French-language print media: Environmental values, media cultures, and the narration of global warming. Canadian Journal of *Sociology, 37*(1), 25–54.

Daniela Mahl is a PhD student at IKMZ – Department of Communication and Media Research, University of Zurich, Switzerland. Her research focuses on conspiracy theories and misinformation in digital platform environments, science and climate change communication, and computational social science.

Dr. Lars Guenther (PhD, Friedrich Schiller University Jena) is senior research and teaching associate in the Cluster of Excellence "Climate, Climatic Change, and Society" at University of Hamburg and extraordinary entre for Research on Evaluation, Science and Technology (CREST) at Stellenbosch University, South Africa. His research interests include science and health communication.





Die Inhaltsanalyse im Forschungsfeld der Sportberichterstattung

Catharina Vögele und Markus Schäfer

1 Einleitung

Das Forschungsfeld der Sportkommunikation beschäftigt sich mit den Zusammenhängen von Kommunikationsprozessen und Sportkontexten (Allen 2017). Sportkontexte sind alle gesellschaftlichen Bereiche und Ereignisse, in bzw. bei denen Sport produziert, ausgeübt, konsumiert oder diskutiert wird (Allen 2017). Im Fokus stehen dabei sowohl die Entstehungsbedingungen, Kanäle und Inhalte als auch die Rezeption und Wirkungen der Sportkommunikation (Denham 2016). Sportkommunikation umfasst sowohl sportbezogene Kommunikation (Kommunikation über Sport; z. B. die journalistische Berichterstattung über den 100-m-Lauf bei den Olympischen Spielen) als auch sportrelevante Kommunikation (Kommunikation, die Auswirkungen auf den Sport hat; z. B. die allgemeine Debatte über den Stellenwert von ehrenamtlicher Arbeit, wenn diese dazu führt, dass sich mehr Menschen in Sportvereinen engagieren) und schließt sowohl massenmedial vermittelte (z. B. die TV-Übertragung eines Fußball-Länderspiels) als auch (teil-) öffentliche (z. B. die parlamentarische Debatte über ein Anti-Doping-Gesetz) und interpersonale Kommunikation ein.

C. Vögele (✉)
Leonberg, Deutschland

M. Schäfer
Institut für Publizistik, Johannes Gutenberg-Universität Mainz, Mainz, Deutschland
E-Mail: markus.schaefer@uni-mainz.de

F. Oehmer-Pedrazzi et al. (Hrsg.), *Standardisierte Inhaltsanalyse in der Kommunikationswissenschaft – Standardized Content Analysis in Communication Research*, https://doi.org/10.1007/978-3-658-36179-2_19

Sport ist eine häufig auf Wettkampf ausgerichtete Aktivität, die körperliche und/oder geistige Fähigkeiten erfordert (u. a. Röthig und Prohl 2009; Stefani 2017). Das Internationale Olympische Komitee listet aktuell 47 olympische Sommer- und 15 olympische Winter-Sportarten (IOC 2020b), darunter so unterschiedliche Disziplinen wie Leichtathletik, Boxen, Skispringen, Biathlon, Curling, Wasserball oder Golf. Hinzu kommen die historische baskische Sportart Pelota sowie 41 weitere vom IOC anerkannte Sportarten, die aktuell nicht Teil des olympischen Programms sind (IOC 2020a). Hierzu gehören beispielsweise Tauziehen, Bowling, Motorbootrennen, Cheerleading, Billard, Bridge und Schach. Da der Sportbegriff und die Vorstellung dessen, was darunter zu fassen ist, seit jeher im Wandel waren bzw. sind und „das faktische Geschehen des Sporttreibens selbst das Begriffsverständnis von Sport" verändert (Röthig und Prohl 2009, S. 493), scheint es sinnvoll, den Begriff auch und gerade mit Blick auf die Sportkommunikation weit auszulegen und etwa auch E-Sport einzubeziehen (Borggrefe 2018; Stefani 2017; Wendeborn et al. 2018).

Angesichts der Vielzahl an Sportarten, sportbezogenen Medieninhalten und Möglichkeiten, diese zu nutzen und über Sport und Sportmedieninhalte zu kommunizieren, verwundert es nicht, dass in der internationalen empirischen Sportkommunikationsforschung eine breite Palette an Untersuchungsobjekten analysiert wird. Diese werden je nach Fragestellung und Erkenntnisinteresse mit Befragungen, Beobachtungen – und eben auch Inhaltsanalysen adressiert.

Um einen empirisch fundierten Ein- bzw. Überblick über die Inhaltsanalyse als Forschungsmethode in der Sportkommunikation zu geben, stützt sich der Beitrag mit Blick auf den deutschsprachigen und internationalen Adressatenkreis auf eine standardisierte Inhaltsanalyse von deutsch- und englischsprachigen Fachzeitschriftenartikeln der letzten zehn Jahre. Sammelbandbeiträge und Monographien zum Themenbereich blieben dabei aus forschungsökonomischen Gründen ausgeklammert. Ziel der (Meta-)Analyse war es, zu erfassen, zu welchen Untersuchungsobjekten mit welchen konkreten Methoden in der Sportkommunikation mithilfe inhaltsanalytischer Ansätze geforscht wird. Da hierbei sowohl die kommunikationswissenschaftliche Forschung im deutschsprachigen Raum als auch die Forschung auf internationaler Ebene von Interesse ist, fokussierte sich die Analyse auf jeweils vier deutschsprachige und vier englischsprachige Fachzeitschriften der Kommunikationswissenschaft mit a) allgemeinem und b) sportspezifischem Themenfokus. Im deutschsprachigen Raum wurden die Zeitschriften *„SCM – Studies in Communication and Media"*, *„Publizistik"*, *„Medien & Kommunikationswissenschaft (M & K)"* und *„Journal für Sportkommunikation und Mediensport"* unter die Lupe genommen, auf internationaler Ebene fungierten die Fachzeitschriften *„Journal of Communication"*, *„Communication & Sport"*, *„International Journal of Sport Communication"* und *„Journal of Sports Media"* als Referenzgrößen.

Der Untersuchungszeitraum umfasste die zehn Jahre vom 1. Januar 2010 bis zum 31. Dezember 2019. Die Auswahl relevanter Beiträge erfolgte in einem mehrstufigen Verfahren. Zunächst wurden in einem ersten Schritt alle Abstracts zu wissenschaftlichen

Artikeln, die in den oben genannten Zeitschriften im definierten Untersuchungszeitraum erschienen sind, von drei CodiererInnen systematisch auf die Verwendung inhaltsanalytischer Methoden durchforstet. War aus dem Abstract nicht klar ersichtlich, ob eine Inhaltsanalyse Teil der Untersuchung war, so wurden zusätzlich auch die dahinterliegenden Volltexte als Entscheidungshilfe herangezogen. Für die Analyse aufgegriffen wurden letztlich alle Journal-Artikel, die a) thematisch erkennbar im Bereich der Sportkommunikation beheimatet sind und sich b) (auch) auf eine eigene empirische Untersuchung mithilfe einer Inhaltsanalyse stützen. Artikel, die ausschließlich Forschungsergebnisse früherer inhaltsanalytischer Studien referieren, jedoch keine eigene (neue) Untersuchung zum Gegenstand haben, wurden entsprechend nicht aufgegriffen.

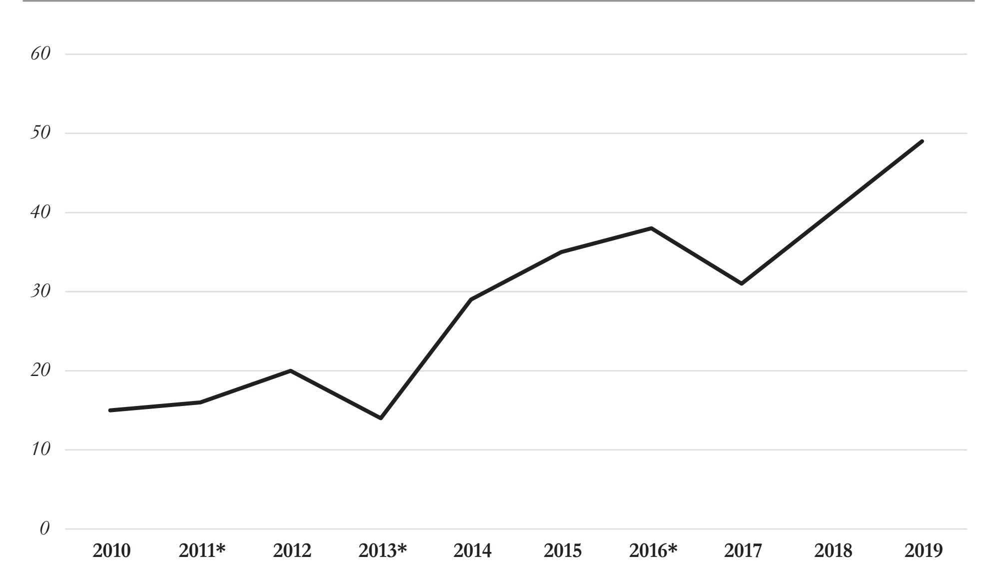
Erfasst wurden u. a. die Fachzeitschrift (Reliabilitätskoeffizient nach Holsti R = 1.0), das Erscheinungsjahr (R = 1.0), die AutorInnen (R = 1.0) und das Untersuchungsobjekt des Beitrags (R = .75). Zudem wurden die Sportart(en) (R = 1.0) und Länder (R = .87), auf die sich die empirischen Analysen beziehen, codiert. Als methodische Aspekte der Untersuchungen wurden die Art der Inhaltsanalyse (quantitativ: manuell/automatisiert, qualitativ; R = .87), die Art des verwendeten Untersuchungsmaterials (u. a. Text, Video, Audio, Fotos; R = 1.0), die untersuchten Medienkanäle (u. a. Print, TV, Radio, Online; R = .93) und Inhalte (u. a. non-fiktional, fiktional; R = .87) sowie die Kombination mit anderen Methoden (R = .87) verschlüsselt. Die Codierung wurde von drei CodiererInnen vorgenommen.

Mithilfe der Ergebnisse dieser Inhaltsanalyse soll im Folgenden ein Überblick über die wichtigsten Merkmale von Inhaltsanalysen zu Themen der Sportkommunikation gegeben werden. Dabei werden sowohl die unterschiedlichen Arten der Analysen als auch die fokussierten Inhalte, Sportarten und Länder, die untersuchten Medienkanäle und das Material sowie Methodenkombinationen beleuchtet.

2 Die Inhaltsanalyse als Methode in der Sportkommunikation

2.1 Häufigkeit und Arten von Inhaltsanalysen

Über die zehn Untersuchungsjahre und acht Journals hinweg wurden insgesamt 287 relevante Beiträge identifiziert, die sich jedoch sehr ungleich auf den Zeitraum und die untersuchten Fachzeitschriften verteilen (Abb. 1; Tab. 1). Während im thematisch breit orientierten *Journal of Communication* im Untersuchungszeitraum kein einziger Beitrag mit Bezug zur Sportkommunikation und der Methode der Inhaltsanalyse veröffentlich wurde, werden gerade in den englischsprachigen Journals, die sich inhaltlich explizit der Sportkommunikation verschreiben, häufig inhaltsanalytische Studien berichtet. In den allgemeinen deutschsprachigen kommunikationswissenschaftlichen Fachzeitschriften kommen inhaltsanalytische Untersuchungen aus dem thematischen Bereich der Sportkommunikation nur vereinzelt vor. Dass diese Tatsache weniger einer fehlenden



* 2011: Start *SCM*; 2013: Start *Communciation & Sport*; 2016: Start *Journal für Sportkommunikation und Mediensport*.

Abb. 1 Anzahl der Studien im Zeitverlauf. (Eigene Darstellung)

Tab. 1 Anzahl der Beiträge in den untersuchten Fachzeitschriften. (Eigene Darstellung)

Fachzeitschriften	n	Anteil in %
Deutschsprachig		
Journal für Sportkommunikation und Mediensport *(seit 2016)*	13	5
Medien & Kommunikationswissenschaft	5	2
Publizistik	1	0
SCM – Studies in Communication and Media *(seit 2011)*	1	0
Englischsprachig		
Communication & Sport *(seit 2013)*	86	30
International Journal of Sport Communication	109	38
Journal of Communication	–	–
Journal of Sports Media	72	25
Summe	**287**	**100**

Relevanz inhaltsanalytischer Forschung im deutschsprachigen Raum als vielmehr einer Lücke spezifischer Publikationsmöglichkeiten mit Bezug zur Sportkommunikation geschuldet sein dürfte, zeigt das *Journal für Sportkommunikation und Mediensport,* in dem seit seinem erstmaligen Erscheinen im Jahr 2016 bereits 13 Studien mit inhaltsanalytischer Ausrichtung publiziert wurden.

Insgesamt ist sowohl im deutsch- als auch im englischsprachigen Raum über den Untersuchungszeitraum hinweg eine Zunahme an Publikationen mit entsprechendem Bezug feststellbar. Mit Blick auf die zeitliche Entwicklung ist allerdings zu beachten, dass einige Zeitschriften nicht über den kompletten Zeitraum hinweg erschienen sind. Dies gilt für die Journals *SCM* (seit 2011), *Communication & Sport* (seit 2013) und *Journal für Sportkommunikation und Mediensport* (seit 2016). Der beobachtete Zuwachs an inhaltsanalytischen Untersuchungen im Zeitverlauf (Abb. 1) lässt sich also zumindest teilweise durch die Neugründung von Zeitschriften erklären. Gleichwohl bleibt festzuhalten, dass auch unter Berücksichtigung der Erscheinungsperioden in den englisch- und deutschsprachigen Fachjournals eine tendenziell steigende Zahl an inhaltsanalytischen Untersuchungen mit Bezug zur Sportkommunikation zu beobachten ist.

In den 287 Studien werden insgesamt 308 eigenständige Inhaltsanalysen berichtet. Hinsichtlich der Arten der durchgeführten Analysen zeigt sich ein nahezu ausgeglichenes Verhältnis zwischen quantitativen und qualitativen Verfahren (Tab. 2). Bei 52 % der Analysen handelt es sich um qualitative, bei 48 % um quantitative Inhaltsanalysen. Automatisierte Inhaltsanalysen sind mit einem Anteil von zwei Prozent in der Sportkommunikationsforschung (noch) recht selten, jedoch seit 2016 regelmäßig zu beobachten.

2.2 Untersuchungsobjekte, Sportarten und Länder

Neunundneunzig Prozent der untersuchten Studien untersuchen non-fiktionale Inhalte, wobei am häufigsten (auch) die journalistische Berichterstattung (61 %) im Fokus steht. Inhalte der Sport-PR wie Pressemitteilungen, Social Media Posts oder Pressekonferenzen werden in mehr als einem Viertel (28 %), Nutzerkommentare in 14 % der Studien analysiert. Fiktionale Inhalte (wie z. B. Videospiele & Filme) dagegen werden von der Forschung nur in Einzelfällen (1 %) ins Visier genommen.

Die Studien behandeln insgesamt ein breites Portfolio an Untersuchungsobjekten, gleichwohl gewisse Schwerpunkte zu beobachten sind. Vergleichsweise häufig werden die Vereins-, Verbands- und SportlerInnenkommunikation – und damit die Öffentlichkeitsarbeit von Sportakteuren – sowie Geschlechter und Gender in der Sportberichterstattung

Tab. 2 Übersicht zu den Arten der durchgeführten Inhaltsanalysen. (Eigene Darstellung)

Art der Inhaltsanalyse	n	Anteil in %
Quantitative Inhaltsanalysen	**147**	**48**
– Automatisiert	7	2
– Manuell	140	46
Qualitative Inhaltsanalyse	**161**	**52**
Summe	**308**	**100**
Basis: N = 308 Inhaltsanalysen in 287 Studien		

inhaltsanalytisch untersucht (jeweils 17 %; Tab. 3). Mit Blick auf die PR-Aktivitäten steht dabei beispielsweise im Fokus, wie SportlerInnen und Verbände die Image Repair Strategien nach Benoit (1995, 1997) in Krisensituationen einsetzen, um etwaige Image-Verluste zu begrenzen. Die Studien nehmen hierfür unterschiedliche Fallbeispiele in den Blick. So untersuchen sie u. a., wie Sportakteure auf sportliches (z. B. Dopingvorwürfe und -nachweise; Hambrick et al. 2015; Thomsen und Anderson 2015) oder privates Fehlverhalten (z. B. häusliche Gewalt oder Affären; Husselbee und Stein 2012; Smith und Keeven 2019) reagieren bzw. wie Verbände wie die FIFA auf entsprechende Vorwürfe (z. B. Korruption; Onwumechili und Bedeau 2017) öffentlich antworten.

Beim Untersuchungsobjekt Geschlechter und Gender in der Sportkommunikation steht häufig die massenmediale Berichterstattung über Sportlerinnen im Fokus (vgl. z. B. Arth et al. 2019; Billings und Angelini 2019; Cooky et al. 2013; Cooky et al. 2015; Kaiser 2018; Turner 2014; Wolter 2015; Xu et al. 2018). So beziehen sich 80 % dieser Studien auf journalistische Berichterstattung und nur etwas mehr als ein Zehntel auf Sport-PR. Am häufigsten wird die entsprechende Darstellung für den Sport im Allgemeinen bzw. über verschiedene Sportarten hinweg betrachtet, ohne direkten Fokus auf eine einzelne Sportart. Knapp 90 % der Studien zu diesem Untersuchungsobjekt beziehen sich auf die USA, wobei die TV-Berichterstattung der Medienkanal ist, der am häufigsten analysiert wird.

Aus inhaltlicher Sicht lässt sich festhalten, dass Frauen in der Sportberichterstattung – abgesehen von der Berichterstattung zu Olympischen Spielen (z. B. Arth et al. 2019; Billings und Angelini 2019; Billings und Young 2015) – immer noch stark unterrepräsentiert sind (vgl. z. B. Billings und Young 2015; Cooky et al. 2013). Cooky et al. (2015) etwa untersuchten in einem Längsschnittdesign die Berichterstattung über Frauensport in den 25 Jahren zwischen 1989 und 2014 in Sportnachrichten und Sportmagazinen in drei lokalen und einem nationalen US-TV-Sender mithilfe einer Kombination aus quantitativer und qualitativer Inhaltsanalyse. Die AutorInnen stellten dabei fest, dass über Frauensport im Vergleich zu Männersport insgesamt sehr wenig berichtet wird, sich die Berichterstattung im Laufe der Zeit jedoch inhaltlich verändert hat. So ist die sexualisierte Berichterstattung über Frauen im Sport tendenziell rückläufig. Gleichzeitig jedoch präsentieren die US-Medien die Sportlerinnen verstärkt in ihrer Rolle als Mütter, Ehefrauen oder Freundinnen, die vor der Herausforderung stehen, Sport- und Familienleben zu vereinbaren – eine Thematik, die in der Berichterstattung über männliche Sportler keine Rolle spielt. Frauensport wird zudem im Vergleich zu Männersport wesentlich nüchterner und weniger unterhaltsam und spannend dargestellt, sodass Cooky et al. (2015) letztlich ein eher ernüchterndes Fazit ziehen: „The last quarter century has seen a dramatic movement of girls and women into sport, but this social change is reflected unevenly in sports media" (S. 261).

Ebenfalls relativ häufig beschäftigen sich Inhaltsanalysen in der Sportkommunikation mit der Fankommunikation (12 %) sowie der Berichterstattung über (Ausrichter von) Großereignisse(n) wie Fußballweltmeisterschaften oder Olympischen Spielen (7 %).

Tab. 3 Untersuchungsobjekte der inhaltsanalytischen Studien zur Sportkommunikation. (Eigene Darstellung)

Untersuchungsobjekte der Inhaltsanalysen	n	Anteil in %
Vereins-, Verband-, Sportler*innenkommunikation	49	17
Fankommunikation	34	12
Social Media in der Sportkommunikation	19	7
Inhalte der Sportberichterstattung		
Geschlechter und Gender in der Sportberichterstattung	49	17
Berichterstattung über (Ausrichter von) Großereignissen	20	7
Kommentierung sportlicher Leistungen	17	6
Berichterstattung über Skandale/Fehlverhalten von Sportakteuren	14	5
Qualität von Sportberichterstattung	13	5
Berichterstattung über Behindertensport	10	4
Berichterstattung über Verletzungen/gesundheitliche Probleme	8	3
Dopingberichterstattung	8	3
Sonstige Untersuchungsobjekte	109	38
Basis: N = 287 Studien, Hinweis: Mehrfachcodierungen waren möglich		

Bezogen auf die Fankommunikation wird beispielsweise analysiert, wie Fans die Übertragung von Wettkämpfen und sportlichen Großereignissen auf Social Media verfolgen und kommentieren (vgl. z. B. Blaszka et al. 2012; Girginova 2015; Rodriguez 2017) oder wie SportlerInnen und Sportteams soziale Medien einsetzen, um mit Fans und Medien zu kommunizieren und eine Beziehung zu ihren Fans aufzubauen (vgl. z. B. Abeza et al. 2017; Hambrick und Kang 2015; Frederick et al. 2014; Wang und Zhou 2015; Waters et al. 2011). Bezogen auf die Berichterstattung über Großereignisse steht z. B. im Fokus, wie über das Gastgeberland und über kritische Aspekte bezüglich der Ausrichtung und Organisation des Ereignisses wie sehr hohe Kosten oder die fehlende Nachhaltigkeit von Bauvorhaben berichtet wird (vgl. z. B. Schallhorn und Häußinger 2019; Yoon und Wilson 2019). Oder es wird analysiert, wie nationale Identitäten in der Berichterstattung über die Wettkämpfe der Großereignisse sichtbar werden (vgl. z. B. Angelini et al. 2012; Li et al. 2016). Zu weiteren und sonstigen Untersuchungsobjekten zählen darüber hinaus u. a. die Medienberichterstattung über (private) Skandale von SportlerInnen (vgl. z. B. Kozman 2013; Meng und Pan 2013), die Berichterstattung über Doping (vgl. z. B. Denham 2019; Starke und Flemming 2017), aber auch die mediale Darstellung von Behindertensport (vgl. z. B. Buysse und Borcherding 2010; Solves et al. 2019, Homosexualität (vgl. z. B. Cassidy 2017) oder der **Leistung bestimmter Sportakteure wie SportlerInnen, TrainerInnen** oder **SchiedsrichterInnen.** Nimmt man in den Blick, welche Untersuchungsobjekte in quantitativen im Vergleich zu qualitativen Inhaltsanalysen untersucht werden, zeigen sich nur wenige nennenswerte Unterschiede. Allerdings ist bei den qualitativen Inhaltsanalysen im Vergleich zu den quantitativen Inhaltsanalysen insgesamt eine größere Breite und Vielfalt der behandelten Untersuchungsobjekte zu beobachten.

Ein Drittel der inhaltsanalytischen Untersuchungen bezieht sich auf Sport im Allgemeinen (23 %) oder Olympische Winter- und/oder Sommerspiele (11 %), ohne auf eine spezifische Sportart zu fokussieren. Über die 287 Studien hinweg stehen insgesamt 35 verschiedene **Sportarten** im Fokus von Inhaltsanalysen. Das Spektrum reicht dabei von A – wie American Football bis Y – wie Yoga. Am häufigsten konzentriert sich die Forschung jedoch auf die populärsten Mannschaftssportarten wie Football, Fußball, Basketball, Baseball und Eishockey (Tab. 4).

Bezüglich der untersuchten Sportarten und Länder sind erwartungsgemäß deutliche Unterschiede zwischen den englisch- und den deutschsprachigen Fachzeitschriften feststellbar, wobei jeweils besonders beliebte Sportarten bzw. große Länder des jeweiligen Sprachraums auch ganz besonders im Zentrum des jeweiligen Forschungsinteresses stehen. In den deutschsprachigen Zeitschriften dominiert der Fußball, 70 % der Studien analysieren Inhalte mit entsprechendem Bezug. In den englischsprachigen Zeitschriften stehen Studien zu Football und Basketball noch höher im Kurs als Fußball, der aber auch hier immerhin an dritter Stelle rangiert. Die vier großen US-Sportarten Football, Basketball, Baseball und Eishockey finden dagegen im deutschsprachigen Raum in den Zeitschriften (bislang noch) keine Beachtung: Sämtliche Studien, die sich mit diesen Sportarten befassen, sind in englischsprachigen Zeitschriften erschienen.

Tab. 4 Top 10 der in den Studien untersuchten Sportarten. (Eigene Darstellung)

Untersuchte Sportart	n	Anteil in %
1. American Football	59	21
2. Fußball	40	14
3. Basketball	36	13
4. Baseball/Softball	23	8
5. Eishockey	16	6
6. Golf	11	4
7. Radsport	8	3
8. Tennis	7	2
9. Schwimmen	5	2
10. Rugby	4	1
11. Volleyball	4	1
Basis: N = 287 Studien, Hinweis: Mehrfachcodierungen waren möglich		

Die inhaltsanalytische Forschung in den analysierten Zeitschriften wiederum zeigt, obwohl die Journals nach ihrem Selbstverständnis international ausgerichtet sind, eine starke Dominanz von Analysen, die sich auf die USA bzw. auf Deutschland beziehen. Zwar werden über alle Studien hinweg Kommunikationsinhalte mit Bezug zu 34 Ländern untersucht. Insgesamt beschäftigen sich jedoch zwei Drittel der untersuchten Studien, in den englischsprachigen Zeitschriften sogar mehr als 70 %, mit Sportkommunikation in den Vereinigten Staaten. Die deutschsprachigen Zeitschriften wiederum fokussieren vor allem auf Deutschland: 90 % der Studien, die in diesen Journals erschienen sind, widmen sich Phänomenen der Sportkommunikation mit entsprechendem Länderbezug.

2.3 Untersuchungsmaterial, Medienkanäle und Methodenkombinationen

Etwas mehr als drei Viertel der Studien (77 %) untersuchen (auch) Merkmale von Texten, in einem Viertel der Untersuchungen stehen Videos (25 %) und in etwas mehr als einem Zehntel Bilder (14 %) im Zentrum der Inhaltsanalysen. Audio-Inhalte zählen dagegen nur in fünf Prozent der Studien zum Untersuchungsmaterial. Die Analyse von Sportkommunikation findet also vor allem textbasiert statt.

Mit Blick auf die untersuchten Medienkanäle liegt der Fokus der Forschung vor allem auf klassischen Printmedien (35 %), gefolgt von sozialen Medien (29 %). Knapp ein Viertel der Studien nimmt (auch) klassische TV-Inhalte in den Blick. Textbasierte Online-Medien wie Nachrichtenseiten, Foren oder Blogs stehen in 19 % der Studien

Tab. 5 Kombinationen mit anderen Methoden. (Eigene Darstellung)

Kombination mit anderer Methode	n	Anteil in %
Keine andere Methode	250	87
Qualitative Befragung	22	8
Quantitative Befragung	13	5
Beobachtung	3	1
Sonstige Methode	5	2
Summe	**293**	**103**
Basis: N = 287 Studien, Hinweis: Mehrfachcodierungen waren möglich		

im Zentrum der Analyse, entsprechende Online-Videokanäle in fünf Prozent der Untersuchungen. Audio-Medien wie das (Online-)Radio spielen sowohl in der Off- als auch der Online-Form in der Forschung kaum eine Rolle (1 %).

Vergleichsweise selten sind auch Methodenkombinationen (Tab. 5). Nur 13 % der analysierten Studien setzen entsprechende Kombinationen der Inhaltsanalysen mit anderen Methoden wie Befragungen oder Beobachtungen ein. Am weitesten verbreitet ist dabei die Kombination zwischen Inhaltsanalyse und Befragung (12 %), wobei qualitative Befragungsdesigns (8 %) bei den WissenschaftlerInnen noch etwas höher im Kurs stehen als quantitative (5 %). Formen der Beobachtung und/oder sonstige Methoden (3 %) kommen in der Sportkommunikation in Kombination mit Inhaltsanalysen dagegen nur selten zum Einsatz.

3 Fazit und Forschungsdesiderata

Die Inhaltsanalyse ist auch im Bereich der Sportkommunikation eine bedeutende Methode der Kommunikationswissenschaft. Das Verhältnis, in dem dabei qualitative Ansätze und quantitative Verfahren zum Einsatz kommen, ist weitgehend ausgeglichen. Vor allem in den letzten Jahren sind auch automatisierte Inhaltsanalysen zu verzeichnen, die sich insbesondere Aspekten der Sportkommunikation im Bereich Social Media widmen. Es ist davon auszugehen, dass sich dieser Trend angesichts der Vielzahl potentieller Forschungsfragen und Untersuchungsgegenstände und vor dem Hintergrund der zunehmenden Verbreitung entsprechender technischer Möglichkeiten, zugänglicher Daten und der Verfügbarkeit des analytischen Know-Hows auch in den kommenden Jahren fortsetzen, mitunter sogar beschleunigen wird.

Methodenkombinationen sind in der internationalen Sportkommunikation noch vergleichsweise selten – hier besteht für künftige Studien in Anbetracht der Optionen, die Inhaltsanalysen gerade bei Längsschnittdaten zur Verknüpfung bieten, deutliches Potential für den Einsatz von entsprechenden Mixed-Method-Designs. Potential besteht methodenunabhängig auch hinsichtlich der Erforschung bisheriger Blind Spots, die sich

im Bereich der internationalen Sportkommunikation u. a. bei den untersuchten Sportarten und nicht-westlichen Ländern zeigen. Zu den Untersuchungsobjekten, die in den kommenden Jahren im deutschsprachigen Raum aufgrund steigender Nutzungszahlen und vor dem Hintergrund der offensiven Internationalisierungs- und Expansionspolitik der nordamerikanischen Ligen weiter an Relevanz gewinnen werden, dürften etwa die Berichterstattung über Football und E-Sport zählen. Gleichzeitig ist davon auszugehen, dass international operierende, spezialisierte Online-Sport-Streaming-Angebote wie *DAZN* oder *Amazon Prime* als Kanäle sportbezogener Kommunikation in Zukunft noch wesentlich stärker in den Fokus der Forschung rücken werden. Gerade angesichts dieser Entwicklungen wäre es sinnvoll, noch mehr „grenzüberschreitende" Forschung in der Sportkommunikation zu wagen – denn bislang scheint die Forschung noch sehr stark auf die medial traditionell starken Sportangebote vornehmlich des eigenen Kultur- und Sprachraums fokussiert. Der Einsatz von Inhaltsanalysen ist hierbei essentiell, um fundierte Daten zu den massenmedialen Konsequenzen der rasanten Entwicklungen auf den Sportrechtemärkten und der Internationalisierungsstrategien des Sports und seiner Verbände zu sammeln und so den vielfältigen Herausforderungen im Bereich der Sportkommunikation aus empirischer Perspektive in Zukunft noch besser gerecht werden zu können.

Relevante Variablen in DOCA – Database of Variables for Content Analysis

Internal and external attributions for sporting success and failure: https://doi.org/10.34778/2zf
Assessed refereeing decision: https://doi.org/10.34778/2zg
(Olympic) Sports: https://doi.org/10.34778/2zh

Literatur

Abeza, G., O'Reilly, N., Seguin, B., & Nzindukiyimana, O. (2017). Social media as a relationship marketing tool in professional sport: A netnographical exploration. *International Journal of Sport Communication, 10*(3), 325–358.

Allen, M. (2017). *The sage encyclopedia of communication research methods* (Band 1–4). Thousand Oaks, CA: SAGE.

Angelini, J. R., Billings, A. C., & MacArthur, P. J. (2012). The nationalistic revolution will be televised: The 2010 Vancouver Olympic Games on NBC. *International Journal of Sport Communication, 5*(2), 193–209.

Arth, Z. W., Hou, J., Rush, S. W., & Angelini, J. R. (2019). (Broad)casting a wider net: Clocking men and women in the primetime and non-primetime coverage of the 2018 Winter Olympics. *Communication & Sport, 7*(5), 565–587.

Benoit, W. (1995). *Accounts, excuses and apologies. A theory of image restoration strategies.* Albany: State University of New York Press.

Benoit, W. (1997). Image repair discourse and crisis communication. *Public Relations Review, 23*(2), 177–186.

Billings, A., & Angelini, J. (2019). Equity achieved? A longitudinal examination of biological sex representation in the NBC Olympic telecast (2000–2018). *Communication & Sport, 7*(5), 551–564.

Billings, A. C., & Young, B. D. (2015). Comparing flagship news programs: Women's sports coverage in ESPN's SportsCenter and FOX Sports 1's Sports Live. *Electronic News, 9*, 3–16.

Blaszka, M., Burch, L. M., Frederick, E. L., Clavio, G., & Walsh, P. (2012). #WorldSeries: An empirical examination of a Twitter hashtag during a major sporting event. *International Journal of Sport Communication, 5*(4), 435–453.

Borggrefe, C. (2018). eSport gehört nicht unter das Dach des organisierten Sports. *German Journal of Exercise and Sport Research, 48*(3), 447–450.

Buysse, J. A. M., & Borcherding, B. (2010). Framing gender and disability: A cross-cultural analysis of photographs from the 2008 Paralympic Games. *International Journal of Sport Communication, 3*(3), 308–321.

Cassidy, W. P. (2017). Inching away from the toy department: Daily newspaper sports coverage of Jason Collins' and Michael Sam's coming out. *Communication & Sport, 5*(5), 534–553.

Cooky, C., Messner, M. A, & Hextrum, R. H. (2013). Women play sport, but not on TV: A longitudinal study of televised news media. *Communication & Sport, 1*(3), 203–230.

Cooky, C., Messner, M. A., & Musto, M. (2015). "It's dude time!": A quarter century of excluding women's sports in televised news and highlight shows. *Communication & Sport, 3*(3), 261–287.

Denham, B. E. (2016). Sports Communication. In *Oxford Bibliographies. Communication.* Abgerufen von https://www.oxfordbibliographies.com/

Denham, B. E. (2019). Coverage of the Russian doping scandal in the New York Times: Intramedia and intermedia attribute agenda-setting effects. *Communication & Sport, 7*(3), 337–360.

Frederick, E., Lim, C. H., Clavio, G., Pedersen, P. M., & Burch, L. M. (2014). Choosing between the one-way or two-way street: An exploration of relationship promotion by professional athletes on Twitter. *Communication & Sport, 2*(1), 80–99.

Girginova, K. (2015). New media, creativity, and the Olympics: A case study into the use of #NBCFail during the Sochi Winter Games. *Communication & Sport, 4*(3), 243–260.

Hambrick, M. E., Frederick, E. L., & Sanderson, J. (2015). From yellow to blue: Exploring Lance Armstrong's image repair strategies across traditional and social media. *Communication & Sport, 3*(2), 196–218.

Hambrick, M. E., & Kang, S. J. (2015). Pin it: Exploring how professional sports organizations use Pinterest as a communications and relationship-marketing tool. *Communication & Sport, 3*(4), 434–457.

Husselbee, L. P., & Stein, K. A. (2012). Tiger Woods' apology and newspapers' responses. A study of journalistic antapologia. *Journal of Sports Media, 7*(1), 59–87.

Kaiser, K. (2018). Women's and men's prominence in sports coverage and changes in large-, medium-, and small-city newspapers, pre- and post-Title IX: A local play for equality? *Communication & Sport, 6*(6), 762–787.

Kozman, C. (2013). The Tiger Woods scandal in the media: Measuring attribute effects on the public. *International Journal of Sport Communication, 6*(2), 214–233.

Li, B., Stokowski, S., Dittmore, S. W., & Scott, O. K. M. (2016). How mediated sporting events constitute nationalism: Chinese newspapers covering the 2014 Incheon Asian Games. *International Journal of Sport Communication, 9*(1), 79–96.

Meng, J., & Pan, P.-L. (2013). Revisiting image-restoration strategies: An integrated case study of three athlete sex scandals in sports news. *International Journal of Sport Communication, 6*(1), 87–100.

Onwumechili, C., & Bedeau, K. (2017). Analysis of FIFA's attempt at image repair. *Communication & Sport, 5(*4), 407–427.

Rodriguez, N. S. (2017). #FIFAputos: A Twitter textual analysis over "Puto" at the 2014 World Cup. *Communication & Sport, 5*(6), 712–731.

Röthig, P., & Prohl, R. (2009). *Sportwissenschaftliches Lexikon*. Schorndorf: Hofmann.

Schallhorn, C., & Häußinger, K. (2019). Putin, Wodka und Politik. Zum Einfluss der Mediennutzung während der Fußball-WM 2018 auf die Wahrnehmung des Gastgebers Russland. *Medien & Kommunikationswissenschaft, 67*(3), 277–293.

Smith, J. S., & Keeven, D. (2019). Creating separation from the on-field product: Roger Goodell's image repair discourse during the Ray Rice domestic violence case. *Communication & Sport, 7*(3), 292–309.

Solves, J., Pappous, A., Rius, I., & Kohe, G. Z. (2019). Framing the Paralympic Games: A mixed-methods analysis of Spanish media coverage of the Beijing 2008 and London 2012 Paralympic Games. *Communication & Sport, 7*(6), 729–751.

Starke, C., & Flemming, F. (2017). Who is responsible for doping in sports? The attribution of responsibility in the German print media. *Communication & Sport, 5*(2), 245–262.

Stefani, R. (2017). *E-sports, mind sports and the Olympics: What is a sport, anyway*? Abgerufen von https://www.statslife.org.uk/sports/3222-e-sports-mind-sports-and-the-olympics-what-is-a-sport-anyway

The International Olympic Committee (IOC) (2020a). *Recognised federations.* Abgerufen von https://www.olympic.org/recognised-federations

The International Olympic Committee (IOC) (2020b). *Sports.* Abgerufen von https://www.olympic.org/sports

Thomsen, S. R., & Anderson, H. (2015). Using the rhetoric of atonement to analyze Lance Armstrong's failed attempt at redeeming his public image. *Journal of Sports Media, 10*(1), 79–99.

Turner, J. S. (2014). A longitudinal content analysis of gender and ethnicity portrayals on ESPN's SportsCenter from 1999 to 2009. *Communication & Sport, 2*(4), 303–327.

Wang, Y., & Zhou, S. (2015). How do sports organizations use social media to build relationships? A content analysis of NBA clubs' Twitter use. *International Journal of Sport Communication, 8*(2), 133–148.

Waters, R. D., Burke, K. A., Jackson, Z. H., & Buning, J. D. (2011). Using stewardship to cultivate fandom online: Comparing how national football league teams use their web sites and Facebook to engage their fans. *International Journal of Sport Communication, 4*(2), 163–177.

Wendeborn, T., Schulke, H. J., & Schneider, A. (2018). eSport: Vom Präfix zum Thema für den organisierten Sport!? *German Journal of Exercise and Sport Research, 48*(3), 451–455.

Wolter, S. (2015). A quantitative analysis of photographs and articles on espnW: Positive progress for female athletes. *Communication & Sport, 3*(2), 168–195.

Xu, Q., Billings, A., & Fan, M. (2018). When women fail to "hold up more than half the sky": Gendered frames of CCTV's coverage of gymnastics at the 2016 Summer Olympics. *Communication & Sport, 6*(2), 154–174.

Yoon, L., & Wilson, B. (2019). Journalism, environmental issues, and sport mega-events: A study of South Korean media coverage of the Mount Gariwang development for the 2018 PyeongChang Winter Olympic and Paralympic Games. *Communication & Sport, 7*(6), 699–728.

Dr. Catharina Vögele war wissenschaftliche Mitarbeiterin an der Universität Hohenheim. Sie promovierte in Kommunikationswissenschaft an der Universität Hohenheim. Ihre Forschungsschwerpunkte liegen in den Bereichen Sportkommunikation und Politische Kommunikation.

Dr. Markus Schäfer ist wissenschaftlicher Mitarbeiter an der Johannes Gutenberg-Universität Mainz. Er promovierte in Kommunikationswissenschaft an der Universität Mainz und hat einen Master in Kommunikationswissenschaft, Politikwissenschaft und Psychologie. Seine Forschungsschwerpunkte sind Sportkommunikation, Gesundheitskommunikation und Wissenschaftskommunikation, mit einem besonderen Fokus auf Journalismusforschung und Medieninhaltsforschung.



Content Analysis in the Research Field of Cultural Coverage

Maarit Jaakkola

1 Introduction

The study of culture in media or mediated culture—referred to here as the study of *cultural coverage*—often makes use of content analysis to build up a more systematized knowledge of possibly evolving patterns that can only be observed by gathering certain amounts of data over a certain period of time. Typically, content analysis is employed to trace the anatomy of the *mediated culture,* either as hierarchies of artistic forms (Schmutz 2009; Stegert 1998) or of as a representation of a specific cultural phenomenon (Roosvall and Widholm 2018; Janssen et al. 2008). Content analysis is (see e.g. Krippendorff 2004) also applied to identify the *mechanisms of mediation* (Jaakkola 2015; Szántó et al. 2004; Shrum, 1991) and follow their evolution over time, i.e., *cultural change* (Purhonen et al. 2019, p. 2). Typically, these dimensions—mediated culture, arts and cultural phenomena, journalistic genres and discourses as well as their change—are interwoven and incorporated in the same study design, even if the emphasis on these three dimensions varies.

Content analysis of cultural coverage requires an underlying "theory" of culture to guide the systematic dissection of the fundamental components of what is referred to as

M. Jaakkola (✉)
Nordicom, University of Gothenburg, Gothenburg, Schweden
E-Mail: maarit.jaakkola@gu.se

M. Jaakkola
Department of Journalism, Media and Communication, University of Gothenburg, Schweden, Schweden

F. Oehmer-Pedrazzi et al. (Hrsg.), *Standardisierte Inhaltsanalyse in der Kommunikationswissenschaft – Standardized Content Analysis in Communication Research,* https://doi.org/10.1007/978-3-658-36179-2_20

"culture." This is not always an easy task; as Raymond Williams (2011, p. 76) remarked, "culture" is one of the most complicated words in the modern English language. Appropriately enough, in their classic study, Kroeber and Kluckhohn (1952) identified over 200 definitions of the concept. In its most basic meaning, however, "culture" refers to the cultivation of the mind, and this process of cultivation takes on a wide variety of different manifestations in different contexts (Williams 2011). This chapter delimits "cultural coverage" by focusing on the *cultural journalistic content,* thus leaving content analyses on cultural phenomena in journalistic content *of any type* (including general news) beyond the scope, which could, following a broad definition, also be referred to as "cultural coverage".

Journalism has adopted an operative definition, in which coverage has been used to refer to content typically classified as "arts and culture": literature, music, performing arts, fine arts, photography, architecture, aesthetics, lifestyle issues, and so on. This classification has become established as a result of the organizational differentiation of editorial sectors in newspapers and other news outlets (Tuchman 1978; Forde 2003), in which "culture" has typically referred to anything that cannot be assigned to any other sections, such as "politics," "economy," or "international." Cultural coverage can be divided into arts, culture, and entertainment journalism (Kristensen 2019). *Arts* or *cultural journalism* is a specialized form of journalism with the most limited scope, with a focus on a limited area of an art form, such as literature or a certain type of music (e.g., classical music or a subgenre), typically published in the distinct section labeled "Arts and Culture," "Feuilleton," or simply "Culture." When culture is defined more broadly to cover lifestyle and entertainment issues, such as celebrity news, media, and everyday cultures, the coverage, often seen as an extension of the core cultural coverage, can be referred to—depending on the newspaper and country—as *current affairs, lifestyle, entertainment,* or *popular journalism* (Hanusch 2013). *Culturally-oriented journalism* is produced by generalists within general (news) journalism, for example, whenever a cultural aspect is activated in political, economic, or local journalistic content (e.g., in op-eds) (see Jaakkola 2015.) Therefore, cultural events can also be traced in general news coverage that reaches beyond cultural journalism (see e.g., Low 2012). The most common understanding of cultural coverage, however, has been to limit it to the specialized forms, where the news sections or organizational structure provide the delimitation.

Instead of taking a general perspective on journalistic coverage, content analysis can also be carried out on more limited subtypes of cultural journalism, delimiting the object of inquiry to one cultural form or genre only. Examples include music journalism (Bruhn Jensen and Larsen 2010; Koreman 2014), film journalism (Kersten and Janssen 2016), and lifestyle journalism (Kristensen and From 2012). Furthermore, studies may focus on the critique of a certain cultural form, such as, for example, performance art reviews (Shrum 1991), art reviews (Heikkilä and Gronow 2018), film reviews (Baumann 2007), music reviews (Connes and Jones 2014; van Venrooij and Schmutz 2010), or food and restaurant reviews (Johnston and Baumann 2015; Kobez 2016). These studies make

it easier for the researcher to deepen into academic study discipline and enable a more nuanced study of subgenres.

Furthermore, culture is created and maintained in very different production contexts that offer different methodological options for the researcher. Professionally generated content (PGC) differs from the more established concept of user-generated content (UGC). PGC often refers to journalistic content, while user-generated content is the result of cultural "produsage" (content-producing engagement) by ordinary cultural citizens and consumers (Bruns 2016). The division between professionals and amateurs has always been porous in cultural journalism, in which an extensive group of producers have been freelancers. In the digital landscape, the grades of professionalism and amateurism are even harder to distinguish (see e.g. Leadbeater and Miller 2004).

Based on the above, we can summarize that there are four different distinctions that mark the anatomy of cultural coverage and are thus of relevance when designing content analyses specifically on cultural coverage:

Cultural form: What *type of culture* does the content represent—high, popular, or everyday culture? A certain cultural form (film, literature, theatre, architecture, etc.)?
Media form: What *type of media* is the cultural content published in—newspapers, online newspapers, magazines, online, television, radio, social media?
Journalistic form: What *type of journalism* or journalistic genre does the cultural content represent—fact-based or opinionated, or news-oriented journalism or criticism (reviewing)?
Production form: What *type of production* does the cultural content originate from—are the producers professional salary-paid staff journalists or freelancers, or professionals or amateurs?

The study of cultural coverage is essentially scattered across different cultural spheres, media types, and scientific disciplines, which affects the emphases and understandings of "culture."[1] Mediated culture is analyzed in qualitative means in many ways across different disciplines in social sciences and the humanities, such as, for example, in literary theory and criticism, performance and visual studies, art history, media and cultural studies, ethnology, and anthropology. These disciplines have less often employed quantitative methodology to capture the structures of culture.

2 Common Research Designs

Culture differs from other news content in that the reality it describes is doubly mediated: the object that the cultural coverage mediates is already a mediation of a reality. This doubly-mediated reality is not as contingent as in non-cultural news, but the yearly cycle of news topics follows the schematized "pseudo-events" produced by cultural institutions (Kepplinger 2016). For example, festivals, book releases, and seasonal concert tours occur at certain points in time and make one cultural form

dominate over others. Media may also have special structures for following certain forms of culture in a systematic way, e.g., thematic pages, regularly published supplements, or journalistic formats dedicated to a single art form. The seasonal and editorial patterns may cause significant bias if consecutive weeks are used as a sampling method. This is why the seasonal variation has to be eliminated, for example, by using the constructed week in sampling (Riffe et al. 1993).

Content analyses, primarily in newspapers, are related to four overarching research questions: 1) What is the extension of cultural content (the amount of exposure of culture or a certain type of cultural coverage)?; 2) What is understood as "culture" (the concept of culture)?; 3) How is "culture" mediated by journalistic means (the genres or the means of presentation)?; and 4) Pertinent to all the previous questions, how have these constants developed over time (the assessment of cultural change)? The studies in which content analysis is applied to cultural coverage can roughly be divided into questions of the concept of culture, means of representation and representation of a cultural phenomenon.

These questions are to a high extent embedded in the theory of cultural intermediation (see, e.g., Bourdieu 1993; Jones et al. 2019), inquiring about the types of mediated arts or culture that the producers of cultural coverage foster as tastemakers, gatekeepers, and active producers of meaning and taste. Studies identifying the manifested cultural concept are often located in aesthetics (e.g. van Venrooij, A., and Schmutz 2010), arts or cultural sociology (e.g. Purhonen et al. 2019), or studies of a certain cultural form, such as film or television (e.g. Baumann 2007), and in these works the mediated culture itself is the object of inquiry.

The means of representation refer to the genres, styles, and modes of reporting (Jaakkola 2015; Wahl-Jorgensen 2013). These studies heavily draw on journalism and media studies, in which fields of scholarly inquiry have emerged within the study of arts and cultural journalism (Purhonen et al. 2019; Jaakkola 2015; Kristensen 2010), lifestyle journalism (Hanusch 2013; Kristensen and From 2012), and (particularly women's) magazine journalism (Ytre-Arne 2012; Johnston and Swanson 2003). Both the intermediation and means of representation studies are often coupled with questions of professional identity and organizational cultures, which also provide a possibility to explore new and emerging identities in blogs and other online platforms, in particular with regard to amateur production (Jaakkola 2018, 2019, 2020, 2022; Kammer 2015; Verboord 2010, 2012).

The representations of a cultural phenomenon are less concerned with the special character of cultural journalism itself, focusing on selected cases of mediated arts or culture, for example, through selecting units of analyses that constitute the representations of cultural phenomena, organizations, persons, personal attributes, or reception of works, related to reception studies, an attempt to understand artistic works' "changing intelligibility by identifying the—interpretative assumptions that give them meaning for different audiences at different periods" (Culler 1981, p. 13). These studies are motivated by the diverse interests of the scientific disciplines within which they are

developed and thus constitute a very heterogeneous group. Typical cultural phenomena examined include art pieces; culture and entertainment, such as individual films and television series (Kristensen et al. 2017; Sparre and From 2017); cultural changes and phenomena, such as globalization or cultural diversity (Roosvall and Widholm 2018; Janssen et al. 2008; Lefrançois and Éthier 2019; Berkers et al. 2014); as well as prizes, competitions, and events (Leppänen 2015; Reason and García 2007; Wahl-Jorgensen 2013). Research on cultural content can also even be driven by questions of extra-artistic topics such as media violence (Gerbner 1972; Smythe 1954), or, for example, social problems (Pitman and Stevenson 2015). Questions of ethnicity, minority and gender, like in the case of "Black lives matter" and "Me too" campaigns, have typically been studied across different genres of journalism, including the cultural content (Elmasry and el-Nawawy 2017; Askanius and Hartley 2019).

All of the above studies have predominantly focused on the culture pages of daily print newspapers (Jaakkola 2015; Kristensen and From 2011; Lund 2005; Reus and Harden 2005, 2015). The bias towards printed journalism may have developed because of the pragmatic questions of access, but also by the fact that cultural journalism in the dailies has had a tradition of strongly focusing on the written word. Moreover, as content analysis was developed in an era when printed mass media dominated (for the cultural area, see e.g., Gerbner 1969) and the study of cultural journalism emerged from ambitions of mapping leading newspapers' culture articles in terms of their underlying concept of culture (e.g., Schulz 1970; Sörbom 1982; Titchener 1969; Varpio 1982). Fewer studies have focused on broadcasting (Hellman et al. 2017; Skara 2012; Monière 1999; see also Lejre and Kristensen 2014) and the study of professionally produced cultural content in online newspapers and digital platforms is still very much in its infancy (Santos Silva 2019).

Much of the content analysis on printed cultural journalism has been connected to national cultural public spheres. Longitudinal analyses have been conducted, for example, in the Nordic countries (Hurri 1993; Jaakkola 2015; Kristensen and From 2011; Larsen 2008; Lund 2005; Purhonen et al. 2019; Riegert and Widholm 2019), Continental Europe (Janssen 1999; Reus and Harden 2005, 2015; Stegert 1998), Eastern and Central European countries (Kõnno et al. 2012), Hispanic countries (Moreira 2005; Santos Silva 2019; da Silva and Santos Silva 2014), and the U.S. (Janeway and Szántó 2003; Szántó et al. 2004). Nevertheless, during the recent decade the comparative intention has significantly grown, putting forward transnational study designs (Bruhn Jensen and Larsen 2010; Heikkilä and Gronow 2018; Janssen et al. 2008; Janssen et al. 2011; Jubin 2010; Kersten and Janssen 2016; Kõnno et al. 2012; Purhonen et al. 2019; Schmutz et al. 2010; Venrooij and Schmutz 2010; Verboord and Janssen 2015). Through a comparison between journalistic cultures and cultural spheres, preferably between media systems that most starkly differ from each other, national characteristics are better highlighted.

In general, the results of the content-analytic studies have formed an important counterweight to arguments on crises of journalism (Alexander et al. 2016) or moral

panics (Drotner 1999). The crisis discourse has become prolific in public discussions and debates on cultural journalism (see, e.g., Jaakkola 2015), with many scholars' research interests, in fact, being motivated by this specific aspect (see, e.g., Knapskog and Larsen 2008; Kristensen and From 2011; Purhonen et al. 2019; Reus and Harden 2005, 2015; Sarrimo 2017; Widholm et al. 2019). In a similar fashion, studies on mediated violence have played a significant role for the emergence of content analysis of media (Gerbner 1972; Smythe 1954). As shown in the next section, analyses do not entirely or at all support the narratives of declining quantity and quality of journalism or the negative impacts of harmful content that are frequently cited in media. Content analyses over time have shown that developments in content are slower and structures are more constant than what is observed in the everyday.

3 Main Constructs

The amount of media exposure dedicated to culture within a newspaper is relevant because the space dedicated to culture can be regarded as a sign of respect and acknowledgement of the culture beat in the news organization. Quantitative content analyses in Northern European newspapers show that the volume of cultural content within a newspaper has generally expanded during the past decades, even if articles have become shorter (Jaakkola 2015; Purhonen et al. 2019). American newspapers suffered heavy cuts at the turn of the millennium (NAJP 1999).

Though the general interest cultural coverage has typically been focused on high-brow content and described as elitist, content analyses indicate that the **forms of culture** has gradually become more inclusive during the past decades. This "opening-up thesis" is supported both by the gradual incorporation of more popular art forms into the cultural concept, such as popular and niche forms of art and everyday culture (Purhonen et al. 2019). The aesthetic classification systems have thus legitimized art forms that were previously left outside the journalistic canon (Venrooij 2009). Moreover, the representational means have become more diverse. Print papers have adopted more contingent, newspaper-specific formats to address culture, using more images and visual elements of storytelling (Santos Silva 2019). According to the "generalization" or "newsification" thesis (Jaakkola 2015; Sarrimo 2017; Widholm et al. 2019), newspapers have also adopted a more news-oriented approach, which has led to investments in the development of reporting in the news **genre** and emphasis on descriptive rather than evaluative content. However, the subjective, emotional, and interpretative element can still be seen in cultural reporting, differentiating it from hard news reporting (Riegert and Widholm 2019). Some content analyses have also traced **sourcing practices,** finding that the share of commercial ready-made content has increased in cultural journalism (Strahan 2010), or included author attributes, such as gender and employment, in the analyses (Jaakkola 2015; Verboord 2012).

4 Research Desiderata

Content analyses focusing on one media channel only, for example the culture pages in the printed newspapers, are increasingly running the risk of losing sight of the overall picture, as many culture sections nowadays place the monitoring of entire cultural forms (such as film) or genres (reviews) online or in cultural supplements. With increased convergence between media channels and organizations, future studies should more carefully take into account the transmedia and cross-platform editorial strategies of journalistic production.

Content analysis has potential for paving the way for problematizing the use of hegemonic cultural concepts and de-westernizing media research, a call made by journalism scholars (Curran and Park 1999; Wasserman and de Beer 2009) by putting different journalistic and cultural parameters in comparison. There are many geo-cultural areas in the world where the professional cultural coverage has not yet been systematically studied. Even national cultural public spheres encompass many layers, such as minority, sub-, and diasporic cultures, which should be studied further. Emerging and alternative forms of cultural coverage should also be more systematically examined, including professionally and semi-professionally produced online content in blogs and other online platforms. The analyses of user-generated content should be explored with the same kind of questions as have been applied to legacy media content, to find out how the cultural online producers challenge or parallel professional cultural coverage, oscillating between institutionalized and non-institutionalized production environments and creating new presentation forms, hierarchies, and preferences. It is evident that mixed methods research designs, ranging from conventional to automatized content analysis and integrating quantitative and qualitative approaches, are becoming increasingly more relevant for capturing the manifold mediations of culture.

Notes

1. Some delimitations regarding references in this chapter: Content analysis is a widely applied method in Master's theses, but these references are excluded. The same applies for conference papers. English-language studies are preferred over studies written in national languages, complemented by some relevant studies in German, French, Spanish, and Scandinavian languages.

Relevant Variables in DOCA—Database of Variables for Content Analysis

Forms of culture: https://doi.org/10.34778/2x
Journalistic genre: https://doi.org/10.34778/2y
Author byline: https://doi.org/10.34778/2z

References

Alexander, J. W., Butler Breese, E., & Luengo, M. (Eds.). (2016). *The crisis of journalism reconsidered: Democratic culture, professional codes, digital future.* Cambridge University Press.

Askanius, T., & Hartley, J. M. (2019). Framing gender justice: A comparative analysis of the media coverage of #metoo in Denmark and Sweden. *Nordicom Review, 40*(2), 19–36.

Baumann, S. (2007). *Hollywood highbrow: From entertainment to art.* Princeton University Press.

Berkers, P.P.L., Janssen, M.S.S.E., & Verboord, M. (2014). Assimilation into the literary mainstream? The classification of ethnic minority authors in newspaper reviews in the United States, the Netherlands and Germany. *Cultural Sociology, 8*(1), 25–44.

Bourdieu, P. (1993). *The field of cultural production: Essays on art and literature*. Polity Press.

Bruhn Jensen, K., & Larsen, P. (2010). The sounds of change: Representations of music in European newspapers 1960–2000. In J. Gripsrud & L. Weibull (Eds.), *Media, markets & public spheres* (pp. 249–266). Intellect.

Bruns, A. (2016). User-generated content. In: Jensen, K.B., Craig, R.T., Pooley, J.D. & Rothenbuhler, E.W. (eds.), The international encyclopedia of communication theory and philosophy. Oxford: Wiley-Blackwell, 1–5.

Conner, T., & Jones, S. (2014). Art to commerce: The trajectory of popular music criticism. *IASPM—Journal of the International Association for the Study of Popular Music*, *4*(2), 7–23.

Culler, J. (1981). *The pursuit of signs: Semiotics, literature, deconstruction*. Routledge.

Curran, J., & Park, M.-J. (1999). *De-westernizing media studies*. Routledge.

da Silva, M. T., & Santos Silva, D. (2014). Trends and transformations within cultural journalism: A case study of newsmagazine Visão. *OBS*, 8*(4), 171–185.

Drotner, K. (1999). Dangerous media? Panic discourses and dilemmas of modernity. *Paedagogica Historica: International Journal of the History of Education, 35*(3), 593–619.

Elmasry, M. H., & el-Nawawy, M. (2017). Do black lives matter? A content analysis of New York Times and St. Louis Post-Dispatch coverage of Michael Brown protests. *Journalism Practice, 11*(7), 857–875.

Forde, E. (2003). Journalists with a difference: Producing music journalism. In S. Cottle (Ed.), *Media organization and production* (pp. 113–130). Sage Publications.

Gerbner, G. (1969). Towards "cultural indicators": The analysis of mass mediated public message systems. *Communication Review, 17*(2), 137–148.

Gerbner, G. (1972). *The violence profile: Some indicators of trends in and the symbolic structure of network television drama 1967–1971.* U.S. Government's printing office.

Hanusch, F. (Ed.). (2013). *Lifestyle journalism*. Routledge.

Heikkilä, R., & Gronow, J. (2018). Stability and change in the style and standards of European newspapers' arts reviews, 1960–2010. *Journalism Practice, 12*(5), 624–639.

Hellman, H., Larsen, L. O., Riegert, K., Widholm, A., & Nygaard, S. (2017). What is cultural news good for? Finnish, Norwegian, and Swedish cultural journalism in public service organisations. In N. N. Kristensen & K. Riegert (Eds.), *Cultural journalism in the Nordic countries* (pp. 111–133). Nordicom.

Hurri, M. (1993). Kulttuuriosasto: symboliset taistelut, sukupolvikonflikti ja sananvapaus viiden pääkaupunkilehden kulttuuritoimituksissa 1945–80. [Cultural desk: Symbolic struggles, generational conflict, and freedom of speech in five culture desks of capital-based dailies 1945–80.] Doctoral dissertation. University of Tampere.

Jaakkola, M. (2015). *The contested autonomy of arts and journalism: Change and continuity in the dual professionalism of cultural journalism.* Tampere University Press.

Jaakkola, M. (2018). Vernacular reviews as a form of co-consumption: User-generated review videos on YouTube. *MedieKultur—Journal of Media and Communication Research, (34)*65, 10–30.

Jaakkola, M. (2019). From re-viewers to me-viewers: The #Bookstagram review sphere on Instagram and the perceived uses of the platform and genre affordances. *Interactions: Studies in Communication and Culture, 10*(1–2), 91–110.

Jaakkola, M. (2020, in press). Useful creativity: Vernacular reviewing on the video-sharing platform Vimeo. *Culture Unbound*.

Jaakkola, M. (2022). Reviewing culture online: Post-institutional cultural critique across platforms. Palgrave Macmillan.

Janeway, M., & Szántó, A. (2003). Arts, culture, and media in the United States. *The Journal of Arts Management, Law and Society, 32*(4), 279–292.

Janssen, S. (1999). Art journalism and cultural change: The coverage of the arts in Dutch newspapers 1965–1990. *Poetics 26*(5–6), 329–348.

Janssen, S., Kuipers, G., & Verboord, M. (2008). Cultural globalization and arts journalism: The international orientation of arts and culture coverage in Dutch, French, German, and U.S. newspapers, 1955 to 2005. *American Sociological Review, 73*(5), 719–740.

Janssen, S., Verboord, M., & Kuipers, G. (2011). Comparing cultural classification: High and popular arts in European and U.S. elite newspapers. *Kölner Zeitschrift für Soziologie und Sozialpsychologie*, *63*(51), 139–168.

Johnston, D. D, & Swanson, D. H. (2003). Undermining mothers: A content analysis of the representation of mothers in magazines. *Mass Communication and Society, 6*(3), 243–265.

Johnston, J., & S. Baumann (2015). *Foodies: Democracy and distinction in the gourmet foodscape* (2nd ed.). Routledge.

Jones, B., Perry, B., & Long, P. (Eds.). (2019). *Cultural intermediaries connecting communities: Revisiting approaches to cultural engagement*. Policy Press.

Jubin, O. (2010). Experts without expertise? Findings of a comparative study of American, British and German-language reviews of musicals by Stephen Sondheim and Andrew Lloyd Webber. *Studies in Musical Theatre, 4*(2), 185–197.

Kammer, A. (2015). Post-industrial cultural criticism: The everyday amateur expert and the online cultural public sphere. *Journalism Practice, 9*(6), 872–889.

Kepplinger, H.M. (2016). Pseudo-event. In G. Mazzoleni (Ed.), *The International Encyclopedia of Political Communication*.

Kersten, A., & Janssen, S. (2016). Trends in cultural journalism: The development of film coverage in cross-national perspective, 1955–2005. *Journalism Practice, 11*(7), 840–856.

Knapskog, K., & Larsen, L. O. (Eds.). (2008). *Kulturjournalistikk: pressen og den kulturelle offentligheten* [Cultural journalism: The press and the cultural public sphere]. Scandinavian Academic Press.

Kobez, M. (2016). The illusion of democracy in online consumer restaurant reviews. *International Journal of E-Politics, 7*(1), 54–65.

Kõnno, A., Aljas, A., Lõhmus, M., & Kõuts, R. (2012). The centrality of culture in the 20th century Estonian press: A longitudinal study in comparison with Finland and Russia. *Nordicom Review, 33*(2), 103–117.

Koreman, R. (2014). Legitimating local music: *Volksmuziek*, hip-hop/rap and dance music in Dutch elite newspapers. *Cultural Sociology, 8*(4), 501–519.

Krippendorff, K. (2004). *Content analysis: An introduction to its methodology* (2nd ed.). Sage Publications.

Kristensen, N. N. (2010). The historical transformation of cultural journalism. *Northern Lights: Film and Media Studies Yearbook, 8*(1), 69–92.

Kristensen, N. N. (2019). Arts, culture and entertainment coverage. In T. P. Vos & F. Hanusch (Eds.), *The international encyclopedia of journalism studies*. Wiley-Blackwell.

Kristensen, N. N., & From, U. (2011). *Kulturjournalistik: journalistik om kultur* [Cultural journalism: Journalism on culture]. Samfundslitteratur.

Kristensen, N. N., & From, U. (2012). Lifestyle journalism: Blurring boundaries. *Journalism Practice, 6*(1), 26–41.

Kristensen, N. N., Hellman, H., & Riegert, K. (2017). Cultural mediators seduced by Mad Men: How cultural journalists legitimized a quality TV series in the Nordic region. *Television & New Media, 20*(3), 257–274.

Kroeber, A. L., & Kluckhohn, C. (1952). *Culture: A critical review of concepts and definitions.* Meridian Books.

Larsen, L. O. (2008). Forskyvninger. Kulturdekningen i norske dagsaviser 1964–2005 [Displacements: Cultural coverage in Norwegian dailies 1964–2005]. In K. Knapskog & L.O. Larsen (Eds.), *Kulturjournalistikk: pressen og den kulturelle offentligheten* (pp. 283–329). Scandinavian Academic Press.

Leadbeater C., & Miller, P. (2004). *The pro-am revolution: How enthusiasts are changing our society and economy.* Demos.

Lefrançois, D., & Éthier, M.-A. (2019). Slāv: une analyse de contenu médiatique centrée sur le concept d'appropriation culturelle [Slāv: A media content analysis focused on the concept of cultural appropriation]. *Revue de recherches en littératie médiatique multimodale, 9*. https://doi.org/10.7202/1062035ar

Lejre, C., & Kristensen, N. (2014). En kvantitativ metode til analyse af radio [A quantitative method for analysing the radio]. *MedieKultur—Journal of Media and Communication Research, 30*(56), 151–169.

Low, D. (2012). Content analysis and press coverage: Vancouver's Cultural Olympiad. *Canadian Journal of Communication, 37*(3), 505–512.

Lund, C. W. (2005). *Kritikk og kommers: kulturdekningen i skandinavisk dagspresse* [Criticism and commerce: Cultural coverage in the Scandinavian daily press]. Universitetsforlaget.

Monière, D. (1999). *Démocratie médiatique et representation politique: analyse comparative de quatre journaux télévisés: Radio-Canada, France 2, RTBF (Belgique) et TSR (Suisse)* [Mediated democracy and political representation: A comparative analysis of four television news channels: Radio-Canada, France 2, RTBF (Belgium) and TSR (Switzerland)]. Les presses de l'Université de Montréal.

Moreira, S. V. (2005). Trends and new challenges in journalism research in Brazil. *Brazilian Journalism Research, 1*(2).

NAJP (1999). *Reporting the arts (I): News coverage of arts and culture in America*. National Arts Journalism Program (NAJP).

Pitman, A., & Stevenson, F. (2015). Suicide reporting within British newspapers' arts coverage. *Crisis, 36,* 13–20.

Purhonen, S., Heikkilä, R., Karademir Hazir, I., Lauronen, T., Rodríguez, C. F., & Gronow, J. (2019). *Enter culture, exit arts? The transformation of cultural hierarchies in European newspaper culture sections, 1960–2010*. Routledge.

Reason, M., & García, B. (2007). Approaches to the newspaper archive: Content analysis and press coverage of Glasgow's Year of Culture. *Media, Culture & Society, 29*(2), 304–331.

Reus, G., & Harden, L. (2005). Politische "Kultur": Eine Längsschnittanalyse des Zeitungsfeuilletons von 1983 bis 2003 [Political 'culture': A longitudinal analysis of culture pages, 1983–2003]. *Publizistik, 50*(2), 153–172.

Reus, G., & Harden, L. (2015). Noch nicht mit der Kunst am Ende [Not yet the end of arts]. *Publizistik, 60,* 205–220.

Riegert, K., & Widholm, A. (2019). The difference culture makes: Comparing Swedish news and cultural journalism on the 2015 terrorist attacks in Paris. *Nordicom Review, 40*(2), 3–18.

Riffe, D., Aust, C. F., & Lacy, S. R. (1993). The effectiveness of random, consecutive day and constructed week sampling in newspaper content analysis. *Journalism & Mass Communication Quarterly, 70*(1), 133–139.

Roosvall, A., & Widholm, A. (2018). The transnationalism of cultural journalism in Sweden: Outlooks and introspection in the global era. *International Journal of Communication, 12*(2018), 1431–1451.

Santos Silva, D. (2019). Digitally empowered: New patterns of sourcing and expertise in cultural journalism and criticism. Journalism Practice, 13(5), 592–601. DOI: https://doi.org/10.1080/17512786.2018.1507682.

Sarrimo, C. (2017). The press crisis and its impact on Swedish arts journalism: Autonomy loss, a shifting paradigm and a "journalistification" of the profession. *Journalism*, *18*(6), 664–679.

Schmutz, V. C. (2009). *The classification and consecration of popular music: Critical discourse and cultural hierarchies*. [Doctoral dissertation, Erasmus University Rotterdam.]

Schmutz, V., van Venrooij, A., Janssen, S., & Verboord, M. (2010). Change and continuity in newspaper coverage of popular music since 1955: Evidence from the United States, France, Germany, and the Netherlands. *Popular Music and Society, 33*(4), 505–515.

Schulz, W. (Ed.). (1970). *Der Inhalt der Zeitungen: eine Inhaltsanalyse der deutschen Tagespresse in der Bundesrepublik Deutschland (1967) mit Quellentexten früher Inhaltsanalysen in Amerika, Frankreich und Deutschland* [The content of the newspapers: A content analysis of the German daily press in the German Republic (1967) with source texts from early content analyses in America, France and Germany]. Düsseldorf.

Shrum, W. (1991). Critics and publics: Cultural mediation in highbrow and popular performing arts. *American Journal of Sociology, 97*(2), 347–375.

Skara, M. (2012). *Analysis of Radiofeuilleton and the themes of its "Thema."* [A European Journalism-Fellowship thesis, Freie Universität Berlin.]

Smythe, D. W. (1954). Reality as presented by television. *The Public Opinion Quarterly, 18*(2), 143–156.

Sparre, K., & From, U. (2017). Journalists as tastemakers: An analysis of the coverage of the TV series Borgen in a British, Swedish and Danish newsbrand in the Nordic Countries. In N. N. Kristensen & K. Riegert (Eds.), *Cultural journalism in the Nordic countries* (pp. 159–178). Nordicom.

Stegert, G. (1998). *Feuilleton für alle: Strategien im Kulturjournalismus der Presse* [Feuilleton for all: Strategies in cultural journalism of the daily press]. Max Niemeyer Verlag.

Strahan, L. (2010). Sources of arts journalism: Who's writing the arts pages? In B. Franklin & M. Carlson (Eds.), *Journalists, sources, and credibility: New perspectives* (pp. 127–138). Routledge.

Sörbom, G. (Ed.). (1982). *Forskningsprojektet Kritik och konst* [The research project Criticism and the arts]. University of Uppsala.

Szántó, A., Levy, D. S., & Tyndall, A. (Eds.). (2004). *Reporting the arts II: News coverage of arts and culture in America.* National Arts Journalism Program (NAJP).

Titchener, C. B. (1969). *A content analysis of B-values in entertainment criticism.* [Doctoral Dissertation in Mass Communication, Ohio State University.]

Tuchman, G. (1978). *Making news: A study in the construction of reality.* Free Press.

van Venrooij, A. (2009). The aesthetic discourse space of popular music: 1985–86 and 2004–05. *Poetics*, *37*(4), 315–332.

van Venrooij, A., & Schmutz, V. (2010). The evaluation of popular music in the United States, Germany and the Netherlands: A comparison of the use of high art and popular aesthetic criteria. *Cultural Sociology, 4*(3), 395–421.

Varpio, Y. (Ed.). (1982). *Kirjallisuuskritiikki Suomessa 2: kirjallisuuskritiikin väyliä ja rakenteita* [Literary criticism in Finland 2: Channels and structures of literary criticism]. Kirjastopalvelu.
Verboord, M. (2010). The legitimacy of book critics in the age of the Internet and omnivorousness: Expert critics, Internet critics and peer critics in Flanders and the Netherlands. European Sociological Review, 26(6), 623–637. doi:https://doi.org/10.1093/esr/jcp039
Verboord, M. (2012). Exploring authority in the film blogosphere: Differences between male and female bloggers regarding blog content and structure. *Interactions: Studies in Communication and Culture, 2*(3), 243–259.
Verboord, M., & Janssen, J. (2015). Arts journalism and its packaging in France, Germany, the Netherlands and the United States, 1955–2005. *Journalism Practice, 9*(6), 829–852.
Wahl-Jorgensen, K. (2013). The strategic ritual of emotionality: A case study of Pulitzer Prize-winning articles. *Journalism, 14*(1), 129–145.
Wasserman, H., & de Beer A. S. (2009). Towards de-westernising journalism studies. In K. Wahl-Jorgensen & T. Hanitzsch (Eds.), *The handbook of journalism studies* (pp. 448–458). Routledge.
Widholm, A., Riegert, K., & Roosvall, A. (2019). Abundance or crisis? Transformations in the media ecology of Swedish cultural journalism over four decades. *Journalism.* Advance online publication August, 6. *Journalism*. https://doi.org/10.1177/1464884919866077
Williams, R. (2011). *Keywords: A vocabulary of culture and society.* Routledge. (Original work published 1976).
Ytre-Arne, B. (2012). *Women's magazines and their readers: Experiences, identity and everyday life.* [Doctoral dissertation, University of Bergen.]

Dr. Maarit Jaakkola ist Co-Direktorin von Nordicom, einem Zentrum für nordische Medienforschung an der Universität Göteborg in Schweden. Außerdem ist sie Dozentin für Journalismus an der Fakultät für Journalismus, Medien und Kommunikation der Universität Göteborg. Sie promovierte in Journalismus an der Universität Tampere in Finnland. Jaakkola ist die Autorin des Buches Reviewing culture online: Post-institutional cultural critique across platforms (Palgrave Macmillan 2022) und ist Chefredakteurin von NordMedia Network, der digitalen Plattform für nordische Medienforschung. Jaakkolas Forschungsinteressen konzentrieren sich auf Kulturjournalismus, Kulturkritik, kulturelles Engagement der Nutzer im Internet und Medienkompetenz.





Content Analysis in the Research Field of Technology Coverage

Gwendolin Gurr und Julia Metag

1 Introduction

Many technologies are fast-growing drivers of innovation and as such have the potential for major transformations of people's lives (Gaskell et al. 1998; Metag 2019). Related to that, technologies and particularly the development of new technologies (also called emerging technologies) call for a variety of actors who try to make themselves heard in the public sphere. Scientists, economic actors, politicians, regulators, and ordinary citizens try to have a voice in the public discussion about the development, implementation, and specific applications of technologies—thus, they strive to reach the audience through media coverage (Metag 2019). Communication research therefore investigates the media coverage of technologies, which is highly relevant within the discourse on technologies. Since technologies can have major impacts on many areas of the societal system, they are issues that attract journalistic attention and, consequently, are frequently covered in the news media. Research on technology coverage mostly

G. Gurr (✉)
Departement für Kommunikationswissenschaft und Medienforschung, Université de Fribourg/
Universität Freiburg, Fribourg, Switzerland
E-Mail: gwendolin.gurr@unifr.ch

J. Metag
Institut für Kommunikationswissenschaft, Westfälische Wilhelms-Universität Münster,
Münster, Germany
E-Mail: julia.metag@uni-muenster.de

F. Oehmer-Pedrazzi et al. (Hrsg.), *Standardisierte Inhaltsanalyse in der Kommunikationswissenschaft – Standardized Content Analysis in Communication Research,* https://doi.org/10.1007/978-3-658-36179-2_21

started in the 1980s with analyses of the coverage of nuclear power (Friedman 1981; Gamson and Modigliani 1989; Kepplinger 1988; Mazur 1981). This was followed by research on the coverage of information technologies (e.g., Arceneaux and Schmitz Weiss 2010), biotechnology (e.g., Gaskell et al. 1998), nanotechnology (e.g., Donk et al. 2012) and—most recently—artificial intelligence (e.g., Brennen et al. 2018), the latter being characterized by more than just technological aspects—just to name the most prominent technologies under scrutiny. As can be seen from these examples, research on journalistic coverage of technologies is often concerned with emerging technologies, since they bring along as yet unknown risks and benefits for a society. Thus, the research field of technology coverage has overlaps with the fields of risk communication and science communication.

Research on media coverage of technologies has intensified over the last years alongside with a broadening of its focus (Metag 2019): Studies exist on the analysis of coverage in different countries (e.g., Metag and Marcinkowski 2014), of different media (e.g., Cacciatore et al. 2012), or different events related to a technology (e.g., nuclear catastrophes (Kristiansen 2017)).

2 Common Research Designs and Combinations of Methods

Some meta-analyses or summarizing reviews exist for specific technologies, such as nuclear energy (Kristiansen 2017) or nanotechnology (Donk et al. 2012). These overviews show that both quantitative (Anderson et al. 2005; Donk et al. 2012; Maeseele and Schuurman 2008; Weaver et al. 2009) and qualitative content analyses (Christidou et al. 2004; Tyshenko 2014) are employed in technology coverage research. Qualitative analyses often employ the concept of discourse analysis (Asayama and Ishii 2017; Maeseele 2015). There are some studies which combine qualitative and quantitative content analyses, mostly to get a more in-depth view of the quantitative data (Vicsek 2014), however the majority of the studies only employ one of the types of content analysis. With regards to research on online content about technologies, also automated content analysis plays a role (Cacciatore et al. 2012; Veltri 2013). Particularly social media content in large quantities, such as tweets in which technologies are discussed, can be analyzed through latent semantic and sentiment analysis (Veltri 2013). However, also traditional newspaper coverage is analyzed using computer-based analysis strategies (Dudo et al. 2011).

Many of the quantitative content analyses also cover longer time periods of several years, thereby showing how the coverage of a technology develops over time (Arceneaux and Schmitz Weiss 2010; Asayama and Ishii 2013; Donk et al. 2012; Teräväinen 2014). For nanotechnology, (e.g., Kjærgaard 2010; Kjølberg 2009) and carbon capture and storage (e.g., Kojo and Innola 2017), the media coverage increased and reached a

peak in the early years of 2000. Biotechnology received increasing media attention already in the late 1990s (e.g., Maeseele and Schuurman 2008; Marks et al. 2007). The majority of research analyzes technology coverage in one country (e.g., Boholm 2013; Kjølberg 2009). Only few studies actually compare the coverage of technologies in different countries (e.g., Metag & Marcinkowski 2014). Most studies focus on one media type, but some research also compares different media types, e.g., print and online media (Cacciatore et al. 2012). Generally, research on technology coverage is very much focused on print media. For all kinds of technologies, studies on the print media coverage of these technologies exist. Television coverage of technologies is analyzed less frequently—for an example see Heidmann and Milde (2013). More recently, studies have investigated the coverage of technologies in the online environment (e.g., Cacciatore et al. 2012; Lupton 2017). On the Internet, technologies can be covered in journalistic channels, such as online outlets of newspapers, as well as non-journalistic forms, such as blogs. Some research has focused on the coverage of technologies on social media, such as on Twitter (Veltri 2013). Content analyses of media coverage of technologies are sometimes combined with other methods. Focus group interviews are employed to compare lay people's understanding of a technology with its representation in media coverage (Vicsek 2014). When online content is analyzed, the additional analysis of web metrics can also enlighten the analysis (Veltri 2013).

The majority of research focuses on technologies such as nuclear energy, biotechnology, GM foods, nanotechnology, carbon capture and storage, synthetic biology, and fracking. The state of research on the coverage of digital media and technologies, however, is scarcer. There are some single studies dealing with the framing of personal and microcomputers (Cogan 2005; Kelly, 2009), the internet (Rössler 2001), mobile phones (Arceneaux 2005), digitization in general (Zeller et al. 2010) or mobile app privacy (Popiel 2019). However, this area of research is quite fragmented. Most studies are concerned with the coverage of one technology, but some studies treat more than one technology (e. g. Gschmeidler and Seiringer 2012) or technology in general (e.g., Willems 1994).

3 Main Constructs Employed in Technology-Related Media Content Analyses

When analyzing the media coverage of these technologies, most researchers apply similar analytical constructs, which in part differ in how they are termed.

A great amount of studies investigates to what extent a technology is presented in terms of its **risks and benefits,** as it is assumed that they shape the public understanding and acceptance of the technology in question (Gaskell et al. 1998). Studies thus investigate to what extent risks and benefits of a technology are mentioned in the media coverage, to what extent a focus on either risks or benefits dominates a media

article or the total media coverage in a time period (e.g., Anderson et al. 2005; Dudo et al. 2011; Marks et al. 2007; Stephens 2005). While some studies analyze risks and benefits by using one variable (Strekalova 2015), the majority of studies measure risks and benefits by using several variables, such as frame elements (Donk et al. 2012) or different types of risks and benefits (e.g., Metag and Marcinkowski 2014). Many of these studies investigate the portrayal of risks and benefits by applying framing analysis (Donk et al. 2012; Dudo et al. 2011; Strekalova, 2015). The theoretical understandings and methodological approaches of framing vary, however. While some studies measure frame elements according to Entman's (1993) definition of frames (e.g., Donk et al. 2012), other studies work with news frames similar to thematic contexts of a technology (e.g., Anderson et al. 2005). Due to the variety of understandings of framing and the dependence of each frame operationalization on the single technology in question, we will give an overview of main results and trends regarding the portrayal of risks and benefits, irrespective of whether these categories are used alone or as part of a framing analysis. Findings on the portrayal of risk and benefits of a technology differ not only depending on the type of technology in question, but also on the media analyzed and among periods. For nanotechnology for example, benefits are dominant in the news media coverage (Cacciatore et al. 2012; Dudo et al. 2011; Strekalova 2015). In some studies, the types of risks and benefits mentioned are of interest. While for carbon capture and storage, political/legal and economic risks and benefits are most relevant (e.g., Feldpausch-Parker et al. 2015), for nanotechnology, medical, scientific and economic benefits are most prominent in the media coverage in Germany, Switzerland and Austria (Metag and Marcinkowski 2014). For synthetic biology, benefits related to energy are more prominent than benefits related to the environment and health (Gschmeidler and Seiringer 2012).

Studies investigating the coverage of a technology frequently examine the overall impression a media article gives of a technology. Some studies measure the positive or negative **tone** or predominant evaluation of a technology by looking at the ratio of risks and benefits mentioned (e.g., Nisbet and Lewenstein 2002; Zimmer et al. 2008) or at statements regarding the technology in question (e.g., Boyd and Paveglio 2014). In other studies, the overall evaluation within the article (e.g., Pietzner et al. 2014; Racine et al. 2006) or optimistic/pessimistic views are analyzed by means of frames (e.g., Nerlich and Jaspal 2013; Tyshenko 2014). While for some technologies such as genomics (Racine et al. 2006) or nanotechnology (Lemańczyk 2012), reporting tends to be more positive or balanced, the tone of reporting on carbon capture and storage varies across countries (Boyd and Paveglio 2014; Pietzner et al. 2014). For some technologies such as nuclear energy, the predominant tone depends on time period or key events respectively (Kristiansen 2017).

Many studies analyze which **actors** or **sources** are cited or quoted by journalists in the media coverage of a technology. Which types of actors are represented to what extent depends on the technology in question. However, scientists, government persons,

politicians, interest groups, business representatives, some kinds of experts, citizens or the media are frequently considered (see for example Lemańczyk 2012, 2014; Maeseele 2015; Nisbet and Lewenstein 2002). For nanotechnology (Anderson et al. 2005; Kjærgaard 2010), carbon capture storage (Asayama and Ishii 2013) and electromagnetic fields (Claassen et al. 2012), scientists, politicians and actors with an economic background are dominant.

In order to identify the aspects of a technology to which the media coverage pays attention, the thematic context, in which the technology is embedded, is analyzed. While this is a primary interest of the majority of studies, different levels of detail are applied, however. In some analyses, the focus is on broad themes such as the role technology plays for health, economics or politics (e.g., Cacciatore et al. 2012; Claassen et al. 2012; Dudo et al. 2011; Maeseele and Schuurman 2008; Teräväinen 2014). Other studies analyze specific topics related to the technology in question either solely or in addition to a broader thematic category (e.g., Kohring et al. 2011; Nisbet and Lewenstein 2002). Again, the themes analyzed and thus the findings differ depending on the technology in question.

4 Research Desiderata

For the study of the media coverage of technology, it would be useful to increase the generalizability of results. So far, most of the analyses focus on the coverage of a single technology in a few media outlets in one country. Conducting more comprehensive and comparative content analyses could be achieved by, first, taking into account more than one technology or technology as an overall domain or not just one or a few but several media genres and outlets. Second, broadening the geographical context of the analyses would be useful. In order to provide an overview of the results so far obtained within the variety of individual case studies on the coverage of technologies, such as nanotechnology, meta analyses could be conducted.

Moreover, it would be beneficial to expand the analyses to media genres other than print media, in particular to online and social media, which has so far rarely been done. This could also include the more prominent use of automated content analysis and methods such as topic modelling. Similar to other areas of content analysis, a stronger focus on the multimodality of content would be desirable, e.g., by including the analysis of texts, visuals and other, often interactive, forms of presentation, such as gifs.

Furthermore, inconsistencies in the frequently applied framing approach impede the comparability of the results, which is why a common application of the framing approach or the development of generic frames for technology coverage regardless of the technology in question would be highly valuable. Related to that, the field would benefit from establishing a common understanding and measurement of risks and benefits related to a technology.

Relevant Variables in DOCA—Database of Variables for Content Analysis

Benefit/risk framing: https://doi.org/10.34778/2zl
Tone: https://doi.org/10.34778/2zn
Representation of actors and sources: https://doi.org/10.34778/2zm

References

Anderson, A. [Alison], Allan, S., Petersen, A., & Wilkinson, C. (2005). The framing of nanotechnologies in the British newspaper press. *Science Communication*, *27*(2), 200–220.

Arceneaux, N. (2005). The world is a phone booth: The American response to mobile phones, 1981–2000. *Convergence: The International Journal of Research into New Media Technologies*, *11*(2), 23–31.

Arceneaux, N., & Schmitz Weiss, A. (2010). Seems stupid until you try it: press coverage of Twitter, 2006-9. *New Media & Society*, *12*(8), 1262–1279.

Asayama, S., & Ishii, A. (2013). Exploring media representation of carbon capture and storage: An analysis of Japanese newspaper coverage in 1990-2010. *Energy Procedia*, *37*, 7403–7409.

Asayama, S., & Ishii, A. (2017). Selling stories of techno-optimism? The role of narratives on discursive construction of carbon capture and storage in the Japanese media. *Energy Research & Social Science*, *31*, 50–59.

Boholm, M. (2013). The representation of nano as a risk in Swedish news media coverage. *Journal of Risk Research*, *16*(2), 227–244.

Boyd, A. D., & Paveglio, T. B. (2014). Front page or "buried" beneath the fold? Media coverage of carbon capture and storage. *Public Understanding of Science*, *23*(4), 411–427.

Brennen, S. J., Howard, P. N., & Nielsen, R. K. (2018). An industry-led debate: How UK media cover artificial intelligence. Retrieved from https://reutersinstitute.politics.ox.ac.uk/our-research/industry-led-debate-how-uk-media-cover-artificial-intelligence.

Cacciatore, M. A., Anderson, A. A., Choi, D.-H., Brossard, D., Scheufele, D. A., Liang, X., . . . Dudo, A. (2012). Coverage of emerging technologies: A comparison between print and online media. *New Media & Society*, *14*(6), 1039–1059.

Christidou, V., Dimopoulos, K., & Koulaidis, V. (2004). Constructing social representations of science and technology: the role of metaphors in the press and the popular scientific magazines. *Public Understanding of Science*, *13*(4), 347–362.

Claassen, L., Smid, T., Woudenberg, F., & Timmermans, D. R.M. (2012). Media coverage on electromagnetic fields and health: Content analysis of Dutch newspaper articles and websites. *Health, Risk & Society*, *14*(7-8), 681–696.

Cogan, B. (2005). "Framing usefulness:" An examination of journalistic coverage of the personal computer from 1982–1984. *Southern Communication Journal*, *70*(3), 248–265.

Donk, A., Metag, J., Kohring, M., & Marcinkowski, F. (2012). Framing emerging technologies. *Science Communication*, *34*(1), 5–29.

Dudo, A., Choi, D.-H., & Scheufele, D. A. (2011). Food nanotechnology in the news. Coverage patterns and thematic emphases during the last decade. *Appetite*, *56*(1), 78–89.

Dudo, A., Dunwoody, S., & Scheufele, D. A. (2011). The emergence of nano news: Tracking thematic trends and changes in U.S. newspaper coverage of nanotechnology. *J&MC Quarterly*, *88*(1), 55–75.

Entman, R. M. (1993). Framing: Toward clarification of a fractured paradigm. *The Journal of Communication*, *43*(4), 51–58.

Feldpausch-Parker, A., Burnham, M., Melnik, M., Callaghan, M., & Selfa, T. (2015). News media analysis of carbon capture and storage and biomass: Perceptions and possibilities. *Energies*, *8*(4), 3058–3074.

Friedman, S. M. (1981). Blueprint for breakdown: Three mile island and the media before the accident. *The Journal of Communication*, *31*(2), 116–128.

Gamson, W. A., & Modigliani, A. (1989). Media discourse and public opinion on nuclear power: A constructionist approach. *American Journal of Sociology*, *95*(1), 1–37.

Gaskell, G., Bauer, M. W., & Durant, J. (1998). The representation of biotechnology: Policy, media and public perception. In J. Durant, M. W. Bauer, & G. Gaskell (Eds.), *Biotechnology in the public sphere: A European Sourcebook.* (pp. 3–12). London: Science Museum.

Gschmeidler, B., & Seiringer, A. (2012). "Knight in shining armour" or "Frankenstein's creation"? The coverage of synthetic biology in German-language media. *Public Understanding of Science*, *21*(2), 163–173.

Heidmann, I., & Milde, J. (2013). Communication about scientific uncertainty: how scientists and science journalists deal with uncertainties in nanoparticle research. *Environmental Sciences Europe*, *25*(1).

Kelly, J. P. (2009). Not so revolutionary after all: the role of reinforcing frames in US magazine discourse about microcomputers. *New Media & Society*, *11*(1-2), 31–52.

Kepplinger, M. (1988). Die Kernenergie in der Presse. Eine Analyse zum Einfluß subjektiver Faktoren auf die Konstruktion von Realität. *Kölner Zeitschrift Für Soziologie Und Sozialpsychologie*, *40*, 659–683.

Kjærgaard, R. S. (2010). Making a small country count: nanotechnology in Danish newspapers from 1996 to 2006. *Public Understanding of Science*, *19*(1), 80–97.

Kjølberg, K. L. (2009). Representations of nanotechnology in Norwegian newspapers — Implications for public participation. *NanoEthics*, *3*(1), 61–72.

Kohring, M., Marcinkowski, F., Donk, A., Metag, J., & Friedemann, A. (2011). Das Bild der Nanotechnologie in deutschen Printmedien. Eine frameanalytische Langzeitstudie. *Publizistik*, *56*(2), 199–219.

Kojo, M., & Innola, E. (2017). Carbon capture and storage in the Finnish print media. *Risk, Hazards & Crisis in Public Policy*, *8*(2), 113–146.

Kristiansen, S. (2017). Characteristics of the mass media's coverage of nuclear energy and its risk: A literature review. *Sociology Compass*, *11*(7).

Lemańczyk, S. (2012). Between national pride and the scientific success of “others”: The case of polish press coverage of nanotechnology, 2004–2009. *NanoEthics*, *6*(2), 101–115.

Lemańczyk, S. (2014). Science and national pride. *Science Communication*, *36*(2), 194–218.

Lupton, D. (2017). ‘Download to delicious’: Promissory themes and sociotechnical imaginaries in coverage of 3D printed food in online news sources. *Futures*, *93*, 44–53.

Maeseele, P. (2015). Risk conflicts, critical discourse analysis and media discourses on GM crops and food. *Journalism: Theory, Practice & Criticism*, *16*(2), 278–297.

Maeseele, P., & Schuurman, D. (2008). Biotechnology and the popular press in northern Belgium. *Science Communication*, *29*(4), 435–471.

Marks, L. A., Kalaitzandonakes, N., Wilkins, L., & Zakharova, L. (2007). Mass media framing of biotechnology news. *Public Understanding of Science*, *16*(2), 183–203.

Mazur, A. (1981). Media coverage and public opinion on scientific controversies. *The Journal of Communication*, *31*(2), 106–115.

Metag, J. (2019). Technology Coverage. In T. P. Vos & F. Hanusch (Eds.), *The Wiley Blackwell-ICA international encyclopedias of communication. The international encyclopedia of journalism studies* (pp. 1–5). Hoboken, NJ: Wiley-Blackwell.

Metag, J., & Marcinkowski, F. (2014). Technophobia towards emerging technologies? A comparative analysis of the media coverage of nanotechnology in Austria, Switzerland and Germany. *Journalism: Theory, Practice & Criticism*, *15*(4), 463–481.

Nerlich, B., & Jaspal, R. (2013). UK media representations of carbon capture and storage: Actors, frames and metaphors. *Metaphor and the Social World*, *3*(1), 35–53.

Nisbet, M. C., & Lewenstein, B. V. (2002). Biotechnology and the American media: The policy process and the elite press, 1970 to 1999. *Science Communication*, *23*(4), 359–391.

Pietzner, K., Schwarz, A., Duetschke, E., & Schumann, D. (2014). Media coverage of four carbon capture and storage (CCS) projects in Germany: Analysis of 1,115 regional newspaper articles. *Energy Procedia*, *63*, 7141–7148.

Popiel, P. (2019). Terms of public sercive: Framing mobile privacy disourses // Terms of public service: Framing mobile privacy discourses. *First Monday*, *24*(11).

Racine, E., Gareau, I., Doucet, H., Laudy, D., Jobin, G., & Schraedley-Desmond, P. (2006). Hyped biomedical science or uncritical reporting? Press coverage of genomics (1992–2001) in Québec. *Social Science & Medicine (1982)*, *62*(5), 1278–1290.

Rössler, P. (2001). Between online heaven and cyberhell. *New Media & Society*, *3*(1), 49–66.

Stephens, L. F. (2005). News narratives about nano S&T in major U.S. and non-U.S. newspapers. *Science Communication*, *27*(2), 175–199.

Strekalova, Y. A. (2015). Informing dissemination research. *Science Communication*, *37*(2), 151–172.

Teräväinen, T. (2014). Representations of energy policy and technology in British and Finnish newspaper media: A comparative perspective. *Public Understanding of Science*, *23*(3), 299–315.

Tyshenko, M. G. (2014). Nanotechnology framing in the Canadian national news media. *Technology in Society*, *37*, 38–48.

Veltri, G. A. (2013). Microblogging and nanotweets: Nanotechnology on Twitter. *Public Understanding of Science*, *22*(7), 832–849.

Vicsek, L. (2014). GM crops in Hungary: Comparing mass media framing and public understanding of technoscientific controversy. *Science as Culture*, *23*(3), 344–368.

Weaver, D. A., Lively, E., & Bimber, B. (2009). Searching for a frame. *Science Communication*, *31*(2), 139–166.

Willems, J. (1994). Science and Technology on TV: Four European countires compared. In T. Elsaesser, J. Simons, & L. Bronk (Eds.), *Writing for the Medium: Television in transition* (pp. 194–202). Amsterdam University Press.

Zeller, F., Wolling, J., & Porten-Cheé, P. (2010). Framing 0/1. Wie die Medien über die „Digitalisierung der Gesellschaft" berichten. *Medien & Kommunikationswissenschaft*, *58*(4), 503–524.

Zimmer, R., Hertel, R., & Böl, G.-F. (2008). *Risikowahrnehmung beim Thema Nanotechnologie: Analyse der Medienberichterstattung*. *BfR-Wissenschaft: 2008,7*. Berlin: Bundesinstitut für Risikobewertung Pressestelle. Retrieved from http://www.bfr.bund.de/cm/350/risikowahrnehmung_beim_thema_nanotechnologie.pdf

Dr. Gwendolin Gurr is Senior Research and Teaching Associate at the Department of Communication and Media Research at Université de Fribourg/Universität Freiburg. Her research interests include political communication, media use and effects.

Prof. Dr. Julia Metag is Professor at the Department of Communication at the University of Muenster, Germany. Her research interests include science communication, political communication, and media effects.





Die Inhaltsanalyse im Forschungsfeld der medialen Selbstthematisierung

Stefano Pedrazzi

1 Einleitung

Die Begriffe *Medienjournalismus* und *Metaberichterstattung* bezeichnen im wissenschaftlichen Diskurs die beiden Hauptformen und -konzepte der medialen Selbstthematisierung. *Medienjournalismus* wird definiert als die journalistische Kommunikation von Medien, die sich inhaltlich mit „Medien oder die Medien betreffende Sachverhalte, Ereignisse, etc." (Krüger & Müller-Sachse 1998, S. 16) auseinandersetzt. Er umfasst neben der als „Journalismusjournalismus" (Malik 2004) benannten, kritischen Auseinandersetzung von Medienorganisationen mit den journalistischen Arbeitsweisen, Leistungen und Strukturen der eigenen oder anderer Redaktionen auch alle anderen Sachverhalte und Ereignisse, in denen Medien über Medienunternehmen, deren Akteure, Produkte, Leistungen und Organisationsbereiche sowie über medienökonomische, medienpolitische und medienethische Themen öffentlich berichten (Beuthner 2005; Arnold 2018). *Metaberichterstattung* hingegen wird „als Berichterstattung über medialisierte Ereignisse definiert, bei der die Rolle des Nachrichtenjournalismus […] oder der PR/Publicity" (Esser et al. 2005, S. 314) thematisiert wird. Metaberichterstattung übt folglich nicht nur Selbstbeobachtung aus, sondern trägt auch den Mechanismen sowie der Rolle anderer Akteure, insbesondere PR-Experten, beim Versuch, mediale Öffentlichkeit herzustellen, Rechnung. Sowohl Medienjournalismus als auch Metaberichterstattung lassen sich, was institutioneller Kontext und Ziele betrifft, von anderen Formen der medialen (Selbst-)

S. Pedrazzi (✉)
DCM, Universität Freiburg, Freiburg, Schweiz
E-Mail: stefano.pedrazzi@unifr.ch

F. Oehmer-Pedrazzi et al. (Hrsg.), *Standardisierte Inhaltsanalyse in der Kommunikationswissenschaft – Standardized Content Analysis in Communication Research*, https://doi.org/10.1007/978-3-658-36179-2_22

Thematisierung unterscheiden, wie beispielsweise von Kommunikation durch Medienunternehmen im Rahmen ihrer Public-Relations-Aktivitäten, aber auch von medienkritischen Blogs oder Nutzerkommentaren.

Mittels Selbstthematisierung verfolgen die Medien prinzipiell die Ausübung der gleichen gesellschaftlichen Funktionen wie mittels Journalismus allgemein: Sie wollen unvoreingenommen und objektiv über Ereignisse und Neuigkeiten informieren und Orientierung liefern im Zusammenhang mit Themen und Entwicklungen aus dem Bereich der Medien, Hintergründe recherchieren, Selbstkritik und -kontrolle ausüben, indem sie Transparenz über ihre Arbeitsweise herstellen, Fehlleistungen aufdecken sowie Machtverhältnisse und Mechanismen der Einflussnahme kritisch hinterfragen, öffentliche Diskussionen über die Medien(gesellschaft) anregen, und dazu beitragen, einen freien Meinungsmarkt herzustellen (Jarren 1988; Ruß-Mohl 1999; Malik 2004; Engels 2005; Arnold 2018). In der Praxis gibt es bei dieser Form der selbstreflexiven Berichterstattung aber eine Reihe von Eigenheiten, die im folgenden Kapitel diskutiert werden und aus (kommunikations-)wissenschaftlicher Perspektive eine gesonderte Analyse begründen.

2 Eigenheiten der medialen Selbstthematisierung

Die Selbstthematisierung durch die Medien stellt eine komplexe journalistische Sonderform dar, bei der die im Journalismus „eingebaute Schizophrenie" (Weischenberg 2004, S. 171) ihre Zuspitzung findet. In modernen Demokratien mit in der Verfassung verankerter Medien- bzw. Pressefreiheit ist die mediale Selbstthematisierung ein bedeutendes Instrument der Medienselbstkontrolle, entsprechend sind die normativen Ansprüche und Erwartungen an sie besonders hoch (Fengler 2016). Der Umstand, dass Medien und JournalistInnen sich dabei sich selbst beobachtend thematisieren, führt aber dazu, dass sie innerhalb mehrerer potenziellen Spannungsfelder operieren und bei dieser Tätigkeit entsprechend rasch an ihre Grenzen stoßen können (Malik 2004; Beuthner & Weichert 2005; Neverla 2019).

Diese Spannungsfelder – auch als „blinde Flecken" (Kreitling 1998) oder „Fallen" (Beuthner & Weichert 2005) der medialen Selbstbeobachtung bezeichnet – können innerhalb der institutionellen Rahmenbedingungen, in denen JournalistInnen ihrer Arbeit nachgehen, als Folge konkurrierender Rollen(verständnisse), Zugehörigkeiten und Interessen auf der individuellen Ebene (JournalistInnen, BerufskollegInnen) wie auch auf der Organisationsebene (Redaktion, Medienunternehmen, Verlag) entstehen und potenziell einer unvoreingenommenen und objektiven Berichterstattung im Weg stehen. Als BeobachterIn von BerufskollegInnen und somit von redaktionseigenen sowie -fremden journalistischen Leistungen steht ein/e MedienjournalistIn nicht nur potenziell in einer „Rollenkontextfalle" (Beuthner & Weichert 2005, S. 21), als Mitglied einer Redaktion und eines Medienunternehmens steht sie oder er zudem in einem Angestelltenverhältnis – und damit in einem gewissen Ausmaß auch in einem Loyalitäts- oder

Abhängigkeitsverhältnis – und folglich potenziell in einer „Unabhängigkeitsfalle" (Beuthner & Weichert 2005, S. 21).

Diese mit Fallen gespickte Form der Selbstthematisierung ist dabei nicht nur in die vielschichtige Wettbewerbssituation mit anderen JournalistInnen, Redaktionen und Medienunternehmen um Aufmerksamkeit und hinsichtlich der publizistischen Qualität der Inhalte, des Vertrauens in die Berichterstattung eines Mediums und der Reputation, ökonomischen Interessen und Ziele eines Medienunternehmens eingebettet. Es ist durchaus möglich, dass sie auch innerhalb einer Medienorganisation zu Konfliktsituationen führen kann, wenn beispielsweise journalistische Normen und Pflichten nicht mit Interessen der Marketing- oder PR-Abteilung in Einklang stehen. In diesem Zusammenhang spricht Arnold (2018) von einem „Vertrauensdilemma im Verhältnis zwischen Medien-PR und Medienjournalismus" (S. 175), wobei das Vertrauen in die Berichterstattung und die Glaubwürdigkeit eines Mediums sowohl aufgrund der Thematisierung eigener Verfehlungen als auch infolge einer Instrumentalisierung der eigenen Kanäle zwecks positiver Darstellung leiden kann.

Dank ihres privilegierten Zugangs zur Öffentlichkeit sind Medienorganisationen in der Lage, die Wahrnehmung von Ereignissen und Themen zu beeinflussen, und zwar nicht nur, wenn sie über Leistungen des eigenen Unternehmens berichten, sondern insbesondere auch im Kontext medienpolitischer Themen, bei welchen Eigeninteressen von Medienunternehmen tangiert sein können (Page 1996; Jarren 1998; McChesney 2008; Donges & Jarren 2017; Ali & Puppis 2018). Medienunternehmen können in solchen Fällen politisch strategisch handelnd versuchen, ihre Kommunikationskanäle dazu einzusetzen, um eine bestimmte Sichtweise eines Themas zu propagieren, indem sie darüber in einer bestimmten Art und Weise berichten (media policy bias), dieses von der politischen Arena fernzuhalten, indem sie nicht darüber berichten (media policy silence), oder sich weigern, bestimmte Optionen zu thematisieren mit dem Ziel, die Diskussion einzuschränken (Freedman 2008, 2010; Ali & Puppis 2018).

Aufgrund einer Reihe potenzieller Rollen-, Interessens-, und Zielkonflikte stellt sich entsprechend die Frage, ob Medienschaffende und -organisationen bei der medialen Selbstthematisierung die journalistischen Normen der Nachrichtenselektion und -vermittlung einhalten und die gleichen Maßstäbe wie bei der Beobachtung und Kritik anderer gesellschaftlicher Teilbereiche oder Systeme anlegen, wenn dabei die eigenen Leistungen kritisch reflektiert oder Eigeninteressen tangiert werden.

3 Trends und Studiendesigns inhaltsanalytischer Untersuchungen zur medialen Selbstthematisierung

Sozialwissenschaftliche Studien, die sich empirisch mit dem Phänomen der medialen Selbstthematisierung beschäftigen, kamen parallel zu Entwicklungen des Mediensystems (Liberalisierung, z. B. duales Rundfunksystem), technologischen Neuerungen (Digitalisierung) sowie einer steigenden Ausdifferenzierung im Bereich der

Medienberufe auf, die zu einer zunehmenden gesellschaftlichen Bedeutung von (Massen) Medien führten. Sie liegen vor allem in Form von Befragungen von JournalistInnen (u. a. Turow 1994; Fengler 2002; Malik 2004; seltener ChefredakteurInnen und/oder ManagerInnen von Medienunternehmen, z. B. Winter & Buschow 2014), beispielsweise zum Rollenverständnis oder zu redaktionellen Abläufen und Entscheidungsprozessen im Zusammenhang mit potenziellen Konfliktthemen, sowie in Form von Inhaltsanalysen vor.

Als *Untersuchungsgegenstand* der inhaltsanalytischen Studien, die sich mit medienjournalistischen Inhalten auseinandersetzen, dominiert die Berichterstattung zu medienpolitischen und medienökonomischen Einzelereignissen: Darin werden potenziell aus Gesetzesrevisionen resultierende Interessenskonflikte thematisiert, die im Zusammenhang mit der Einführung des privaten Rundfunks (Weiß 1985, 1986), mit Deregulierungsbestrebungen und Wettbewerbsförderung (Pratte & Whiting 1986; Snider & Page 1997; Gilens & Hertzman 2000; Schejter & Obar 2009), mit dem Umfang und der Form der Finanzierung des öffentlich-rechtlichen Rundfunks (Weiß 1988; fög 2015, 2018) und mit der Anpassung des Leistungsauftrags öffentlich-rechtlicher Rundfunkanstalten im Onlinebereich (Löblich 2011; Maier & Dogruel 2016) entstehen können. Auch die Berichterstattung zu angrenzenden Gebieten, die für Medienunternehmen aus operativer Sicht relevant sein können, wie z. B. die Forderung nach Mindestlöhnen für Postdienste (Dybski et al. 2010) oder die Neugestaltung des Urheberrechts (Tonndorf 2015), wurde vereinzelt untersucht. Pfetsch (2003) vergleicht die Berichterstattung über Medienpolitik mit anderen Politikfeldern. Einen weiteren Schwerpunkt bilden (versuchte) Übernahmen und Fusionen (Kweon 2000; Beck 2001; Hackett & Uzelman 2003; Müller & Donsbach 2006; Kemner et al. 2008; Lichtenstein 2011). Eine zweite Gruppe bilden Studien, welche die mediale Selbstthematisierung allgemein (Pointner 2010; Eberwein 2010; Wyss et al. 2012), hinsichtlich Unterschiede in der Berichterstattung über private und öffentlich-rechtliche Medien (Uzelman et al. 2005) oder im Zusammenhang mit einem langfristigen Trend wie der Pressekrise (Brüggemann et al. 2016) analysieren. Bei inhaltsanalytischen Studien, die sich mit Metaberichterstattung, also der Thematisierung der Rolle des Journalismus und von PR-Akteuren bei der Herstellung von Öffentlichkeit, auseinandersetzen, dominiert die Berichterstattung im Zusammenhang mit Wahlen (Johnson et al. 1996; Esser et al. 2001; Esser & D'Angelo 2003, 2006; Wise & Brewer 2010) und Krieg (Esser et al. 2005) als Hauptschauplatz. Drentwett (2009) vergleicht Metaberichterstattung im Zusammenhang mit verschiedenen Ereignistypen, nämlich Unfällen, Wahlkampf, Krieg und Anschlägen.

Als *Untersuchungsmaterial* dominieren journalistische Beiträge in Zeitungen und Zeitschriften. Seltener analysieren Studien ausschließlich TV-Inhalte (Esser & D'Angelo 2006; Schejter & Obar 2009; Wise und Brewer 2010) oder vergleichen Inhalte in Presseerzeugnissen und TV (Johnson et al., 1996; Snider & Page 1997; fög 2015, 2018) respektive in Presse und online (Eberwein 2010; Tonndorf 2015).

Die inhaltsanalytischen Studien zur medialen Selbstthematisierung bedienen sich einer Reihe verschiedener *theoretischer Zugänge.* Dominant sind Theorien, die

reflektieren, wie Medienunternehmen, Redaktionen und JournalistInnen die Berichterstattung instrumentalisieren können, um bestimmte Ziele zu erreichen (z. B. Eigeninteressen durchsetzen, Distinktion zu PR oder Konkurrenz, Imagepflege, usw.). Dies kann beispielsweise dadurch erfolgen, dass sie bestimmte Aspekte von Themen mittels der Verwendung von Frames selektiv hervorheben (Kweon 2000; Esser & D'Angelo 2003, 2006; Esser et al. 2005; Drentwett 2009; Schejter & Obar 2009; Pointner 2010; Lichtenstein 2011; Löblich 2011; Tonndorf 2015; Brüggemann et al. 2016) oder im Sinne von Theorien der Nachrichtenauswahl wie News-Bias über bestimmte Themen je nach Interessenslage unterschiedliche Selektions- und Qualitätskriterien anwenden und bspw. in gesteigerter oder verringerter Intensität berichten bzw. diese gar nicht thematisieren (Gilens & Hertzman 2000; Beck 2001; Hackett & Uzelman 2003; Müller & Donsbach 2006; Kemner et al. 2008; Pointner 2010; Lichtenstein 2011). Seltener werden theoretische Ansätze wie die normative Demokratietheorie (Snider & Page 1997; Schejter & Obar 2009; Dybski et al. 2010) und die Theorie des kommunikativen Handelns (Beck 2001) beigezogen, welche die Rolle und Verantwortung der Medien und ihrer Berichterstattung für Demokratie und Öffentlichkeit zugrunde legen. In Einzelfällen dienen der Neo-Institutionalismus (Esser et al. 2001), der akteurzentrierte Institutionalismus (Maier & Dogruel 2016), Policy-Netzwerke (Pfetsch 2003) und die politische Ökonomie (Uzelman et al. 2005) als theoretische Grundlage für die inhaltsanalytischen Studien.

Was eingesetzte Verfahren und *Studiendesigns* betrifft, so sind bei der Analyse der medialen Selbstthematisierung quantitative Inhaltsanalysen in der Überzahl. Qualitative Verfahren werden oft ergänzend, beispielsweise zwecks Identifikation von Argumenten oder Frames, eingesetzt (Dybski et al. 2010; Lichtenstein 2011; Tonndorf 2015). Einzelne Studien setzen gänzlich auf das Verfahren der qualitativen Inhaltsanalyse (Beck 2001; Brüggemann et al. 2016; Löblich 2011). Snider und Page (1997) sowie Brüggemann et al. (2016) haben einen Mehrmethodenansatz bestehend aus Inhaltsanalyse, Dokumentenanalyse von Regierungsberichten und Parlamentsprotokollen und Befragung von PolitikerInnen, Mitgliedern der Verwaltung und PolitikexpertInnen bzw. PolitikerInnen und IndustrievertreterInnen gewählt, während Maier und Dogruel (2016) die Inhaltsanalyse mit einer Netzwerkanalyse zur Identifikation von Akteursbeziehungen ergänzt haben. Die grosse Mehrheit der Studien bedient sich eines vergleichenden Analysedesigns und vermutet dabei einen Zusammenhang zwischen Medienstrukturen und -inhalten (Schweizer, 2019). Studien, die sich mit medienjournalistischen Inhalten beschäftigen, tendieren dazu, die Berichterstattung von Medienorganisationen mit unterschiedlicher Distanz zum Gegenstand der Berichterstattung zu vergleichen, wobei die Distanz infolge unterschiedlicher (wirtschaftlicher oder politischer) Eigeninteressen, redaktioneller Linien, Finanzierungsmodellen und/oder organisationaler Zugehörigkeiten von Medien resultieren kann (Beck 2001; Dybski et al. 2010; Gilens & Hertzman 2000; Hackett & Uzelman 2003; Kemner et al. 2008; Lichtenstein 2011; Löblich 2011; Maier & Dogruel 2016; Müller & Donsbach 2006; Pointner 2010; Pratte & Whiting 1986; Schejter & Obar 2009; Snider & Page 1997; Uzelman et al. 2005; Weiß 1985, 1986, 1988). In den

Studien zur Metaberichterstattung wird vornehmlich die Berichterstattung zu einzelnen oder mehreren Medienereignissen (z. B. Wahlkampf, Krieg, …) in einem oder mehreren Ländern und/oder Medien(formaten) verglichen (Drentwett 2009; Esser & D'Angelo 2003, 2006; Esser et al. 2001, 2005; Johnson et al. 1996; Wise & Brewer 2010).

4 Zentrale Konstrukte inhaltsanalytischer Studien zur medialen Selbstthematisierung

Inhaltsanalytische Studien zur medialen Selbstthematisierung legen einerseits den Fokus darauf, ob JournalistInnen, Medienunternehmen und Verlage neutrale Vermittler oder strategisch handelnde Akteure sind, die ihren privilegierten Zugang zur Öffentlichkeit dazu nutzen, um Eigeninteressen zu verfolgen oder Imagepflege zu betreiben. Es geht dabei auch um die Frage, ob sie hinsichtlich möglicher Eigeninteressen Transparenz herstellen. Zum anderen gehen sie den Fragen nach, ob, in welchem Umfang und in welcher Weise Medien die eigene Rolle, Funktion und Leistungen in der eigenen Berichterstattung reflektieren.

4.1 Verfolgung von Eigeninteressen (Medienjournalismus)

Die Befunde der inhaltsanalytischen Studien zum Medienjournalismus deuten mehrheitlich darauf hin, dass Medien die Berichterstattung strategisch dazu einsetzen, um Eigeninteressen zu verfolgen – insbesondere, wenn sie über medienpolitische oder medienökonomische Themen und Ereignisse berichten. Indem sie über die Auswahl sowie die Präsentation von Inhalten bestimmen, können sie bestimmten Themen und Ereignissen mehr oder weniger Relevanz zuschreiben oder diese im Extremfall sogar gänzlich zu entziehen versuchen, indem sie nicht darüber berichten.

In diesem Zusammenhang fanden mehrere Studien bei Medien mit unterschiedlicher Interessenslage eine systematische Abweichung hinsichtlich der Häufigkeit (Pratte & Whiting 1986; Uzelman et al. 2005; Kemner et al. 2008; Pointner 2010) und des Umfangs (Beck 2001; Hackett & Uzelman 2003; Kemner et al. 2008) der Berichterstattung. Beispielsweise stellten Kemner et al. (2008) fest, dass die Medien eines Verlags, der die Übernahme eines Konkurrenzverlags anstrebte, diese deutlich seltener und weniger umfangreich thematisierten als vergleichbare Medien von nicht an der Transaktion beteiligten Verlagen. Ihrer Interpretation nach „scheut der Verlag die große Diskussion und bevorzugt eine überschaubare, auf wenige Beiträge begrenzte Diskussion" (Kemner et al. 2008, S. 72) während die anderen Medien eine breite, öffentliche Diskussion über das umstrittene Vorhaben anstreben. Als weitere Indikatoren für eine

versuchte Einflussnahme auf die Relevanzzuschreibung von Ereignissen oder Themen werden auch die vermehrte Platzierung von Beiträgen an prominenten Stellen wie der Titelseite (Beck 2001; Dybski et al. 2010) und die Hervorhebung von Eigeninteressen stützende Aussagen an zentralen Stellen (Müller & Donsbach 2006) gedeutet. Ein einseitiger und verstärkter Einsatz von Kommentaren, zuweilen auch direkt aus der Feder der VerlegerInnen, als das für die Thematisierung gewählte Genre, konnte in einer Reihe von Studien (Weiß 1985, 1986, 1988; Pratte & Whiting 1986; Snider & Page 1997; Beck 2001; fög 2015, 2018) nachgewiesen werden, was eher als öffentliche Form der Positionierung denn als diskreter Versuch der Beeinflussung der Relevanzzuschreibung gewertet werden kann.

Subtiler erfolgt die Verfolgung der Eigeninteressen über inhaltliche Elemente der Berichterstattung. Eine Reihe von Studien (Weiß 1986; Gilens & Hertzman 2000; Kweon 2000; Hackett & Uzelman 2003; Uzelman et al. 2005; Müller & Donsbach 2006; Kemner et al. 2008; Tonndorf 2015; Maier & Dogruel 2016; fög 2015, 2018) konnte in diesem Zusammenhang eine insgesamt unausgewogene Tonalität der Berichterstattung nachweisen, wobei die Medien ihre Position über eine unausgeglichene Verwendung von pro und kontra Argumenten propagierten bzw. eine thematische Fokussierung der Diskussion anstrebten, indem sie die Argumentvielfalt einschränkten. Zu einem ähnlichen Ergebnis gelangen auch Studien (Schejter & Obar 2009; Pointner 2010; Lichtenstein 2011; Löblich 2011; Brüggemann et al. 2016), die den Einsatz von Frames untersuchten. Beispielsweise erfolgte die Unterlassung der Berichterstattung zu den positiven Folgen einer geplanten Gesetzesänderung laut Löblich (2011) in Einklang mit den unternehmerischen Interessen der publizierenden Verlage und bezweckte eine Einengung des öffentlichen Diskurses. Auch eine Prävalenz opportuner – eine Eigeninteressen unterstützende Position vertretende – **Akteure [Actors]** und **Experten** in hoher Anzahl konnte in mehreren Studien (Beck 2001; Kemner et al. 2008; Lichtenstein 2011; Maier & Dogruel 2016; fög 2018) festgestellt werden und wird als Strategie zur Legitimierung und Objektivierung gewertet. Bezüglich der **Offenlegung von Eigeninteressen [Disclosure of own interests]** im Rahmen der Berichterstattung offenbaren die Studien (Beck 2001; Müller & Donsbach 2006; Kemner et al. 2008) kein einheitliches Bild, das auf eine Verfolgung von Eigeninteressen, beispielsweise durch reduzierte Transparenz, hindeutet: mitunter starke Abweichungen auch innerhalb eines Verlags deuten eher auf unterschiedliche redaktionelle Routinen hin. Letztlich fanden Studien (Snider & Page 1997; Pointner 2010) Hinweise, die auf eine von Eigeninteressen geleitete thematische Selektionslogik hindeuten. Beispielsweise fand Pointner (2010) systematische Abweichungen bezüglich des inhaltlichen Fokus der medienjournalistischen Gesamtberichterstattung, wobei das eigene Unternehmen öfter im Zusammenhang mit erfolgreichen Ereignissen und andere Medienunternehmen vermehrt im Rahmen rechtlicher Auseinandersetzungen thematisiert wurden.

4.2 Reflexion der eigenen Rolle und Leistung (Metaberichterstattung)

Die Ergebnisse der inhaltsanalytischen Studien zur Metaberichterstattung deuten darauf hin, dass die Medien ihre eigene Rolle und Leistung sowie den Einfluss von PR-Akteuren im Zusammenhang mit medialisierten Ereignissen in zunehmendem Ausmaß öffentlich reflektieren. Studien berichten seit den 90er-Jahren eine zunehmende Tendenz im Umfang der medialen Selbstreflexion sowohl in den USA als auch in Großbritannien und Deutschland (Johnson et al. 1996; Esser et al. 2005; Esser & D'Angelo 2006; Eberwein 2010). Diese beläuft sich aber beispielsweise in der Schweiz auf einem niedrigen Niveau (Wyss et al. 2012). Als Ressort dominiert dabei das Politikressort, und zwar selbst wenn bei einem Medium ein Medienressort vorhanden ist (Esser et al. 2005; Drentwett 2009). Dies lässt sich dem Umstand anrechnen, dass Metaberichterstattung insbesondere im Zusammenhang mit Wahlkampf oder kriegerischen Ereignissen erforscht wurde.

Metaberichterstattung nehmen die Medien tendenziell aus der **Distanz [Distance]** vor. Beobachtung und insbesondere Kritik üben sie verstärkt auf einer intermedialen (z. B. in der Presse liegt der Fokus auf Leistungen in TV und vice versa) oder mediensystemischen Ebene aus und lassen gegenüber dem eigenen Medienhaus eher Zurückhaltung walten (Esser et al. 2005; Drentwett 2009; Eberwein 2010; Wyss et al. 2012). Presse und TV behandeln zwar im Rahmen der Metaberichterstattung die gleichen Themen, dabei fällt aber die Reflexion der Leistung der TV-Berichterstattung kritischer aus (Johnson et al. 1996; Wise & Brewer 2010).

Mittels des Einsatzes von Frames im Rahmen der Metaberichterstattung streben die Medien an, die eigene Unabhängigkeit von PR-ExpertInnen zu demonstrieren und die Relevanz des eigenen Anspruchs auf Objektivität zu unterstreichen (Esser et al. 2001; Wise & Brewer 2010). In der stärker selbstbezüglichen Metaberichterstattung im Rahmen von Wahlkämpfen heben die Medien vor allem die eigene Vermittlungsleistung hervor, während sie im Rahmen der Metaberichterstattung zur Rolle der PR diese als strategisch einordnen und dadurch ein antagonistisches Bild zwischen Medien und PR erzeugen (Esser & D'Angelo 2003, 2006; Esser et al. 2005). Die Metaberichterstattung im Rahmen von kriegerischen Ereignissen unterscheidet sich dadurch, dass die Medien die eigene Leistung als aktiver einordnen, ihre Verantwortung hervorheben aber auch eine ausgeprägtere Personalisierung und Subjektivierung durch die KriegsreporterInnen diskutieren, während bei der PR die Vermittlungsleistung stärker in den Fokus rückt (Esser et al. 2005). Markante Unterschiede bestehen in verschiedenen nationalen Kontexten bezüglich der Diskussion der Rolle von sogenannten Spin-Doctors: Während sie in den USA als kompetente Quelle angesehen werden, gelten sie in Europa eher als Bedrohung für die Pressefreiheit (Esser et al. 2001). Dennoch zeichnet sich insgesamt der Trend ab, dass sich die europäische Metaberichterstattung an die US-amerikanische anpasst (Esser & D'Angelo 2006).

5 Fazit und Forschungsdesiderata

Die Ergebnisse der inhaltsanalytischen Studien zur medialen Selbstthematisierung zeigen, dass die Medien zwar kritische Selbstbeobachtung ausüben, sich aber trotzdem eine gewisse Zurückhaltung auferlegen, wenn es sich um die eigenen Leistungen oder das eigene Unternehmen handelt. Zudem deuten die Ergebnisse darauf hin, dass die Medien strategisch handelnde Akteure sind, die mittels medialer Selbstthematisierung Eigeninteressen zu verfolgen, Imagepflege zu betreiben oder ihre Unabhängigkeit von anderen Akteuren, die auch die Herstellung medialer Öffentlichkeit anstreben, zu demonstrieren.

Inhaltsanalytische Studien, welche die mediale Selbstthematisierung analysiert haben, legen also den Inferenzschluss von den Inhalten und weiterer Aspekte der Berichterstattung auf die Gründe und Motivationen für dieses publizistisches Verhalten nahe. Trotzdem ist in diesem Zusammenhang immer auch zu bedenken, dass die Eigenberichterstattung hinsichtlich Selektion, Produktion und Publikation mit anderen Inhalten konkurriert, und dass auch weitere Gründe für Nicht-Thematisierung denkbar sind als strategisches Handeln zwecks Unterdrückung eines Themas (Malik 2005; Müller & Donsbach 2006). Entsprechend sind weitere Untersuchungen wünschenswert, die sich des Themas mittels einer Kombination aus Inhaltsanalyse und Befragung von (Medien-)JournalistInnen, ChefredakteurInnen, PR- und Marketing-ManagerInnen und VerlegerInnen annehmen, um mehr über redaktionsinterne, sowie auch unternehmensinterne Prozesse zu erfahren und dem Inferenzschluss noch mehr Robustheit zu verleihen. Vielversprechend wäre im Zusammenhang mit medienpolitischen Eigeninteressen auch eine Kombination von Inhaltsanalyse mit Dokumentenanalyse sowie einer Befragung von anderen an medienpolitischen Prozessen beteiligten Akteuren, von welchen man mehr über die Selektionskriterien von JournalistInnen und Medien im Zusammenhang mit „opportunen Zeugen" (Hagen 1992) oder zu Strategien zur Einengung des Diskurses und zur Verfolgung von Eigeninteressen erfahren könnte.

Weiter fällt bei den bisherigen Studien auf, dass der Fokus fast ausschließlich auf Presseinhalten lag: In diesem Zusammenhang wäre die Untersuchung von medialer Selbstthematisierung durch TV-Sender, die insbesondere im Fall von öffentlich-rechtlichen Anstalten politisch stärker reguliert sind (inkl. Leistungsauftrag und Finanzierung), interessant. Digitalisierung und Konvergenz haben zudem bei einer Vielzahl von Medienverlagen zu einer Diversifizierung ihrer Portfolios geführt, so dass diese z. B. Vermittlungsplattformen (für Jobs, Immobilien, etc.) besitzen, die einer anderen Gesetzgebung als der medienpolitischen unterstehen. Es stellt sich folglich die Frage, ob die Verlage die eigenen Kommunikationskanäle auch dazu nutzen, um solche politischen Prozesse in ihrem Sinne zu beeinflussen. Letztlich hat die Digitalisierung auch zu einer Veränderung der Distribution von Medieninhalten geführt. Analog der Platzierung von Beiträgen an prominenten Stellen zur Steigerung der Relevanzwahrnehmung, lässt sich untersuchen, ob und wie Medien bei der Distribution digitale Möglichkeiten zur Relevanzsteigerung nutzen, um Eigeninteressen zu verfolgen.

Relevante Variablen in DOCA – Database of Variables for Content Analysis

Actors: https://doi.org/10.34778/2zc
Disclosure of own interest: https://doi.org/10.34778/2zd
Distance: https://doi.org/10.34778/2ze

Literatur

Ali, C. & Puppis, M. (2018). When the watchdog neither barks nor bites: Communication as a power resource in media policy and regulation. *Communication Theory, 28*(3), 270–291.

Arnold, D. (2018). Das Vertrauensdilemma im Verhältnis zwischen Medien-PR und Medienjournalismus. In O. Hoffjann & R. Seidenglanz (Hrsg.), *Allmächtige PR, ohnmächtige PR: Die doppelte Vertrauenskrise der PR* (S. 175–196). Wiesbaden: Springer Fachmedien.

Beck, K. (2001). Medienberichterstattung über Medienkonzentration. *Publizistik, 46*(4), 403–424.

Beuthner, M. (2005). Der Überjournalist. Versuch einer Konturierung medienjournalistischer Kompetenzbereiche und Berichterstattungsfelder. In M. Beuthner & S. A. Weichert (Hrsg.), *Die Selbstbeobachtungsfalle. Grenzen und Grenzgänge des Medienjournalismus* (S. 75–91). Wiesbaden: VS Verlag für Sozialwissenschaften.

Beuthner, M. & Weichert, S. A. (2005). Internal Affairs – oder: die Kunst und die Fallen medialer Selbstbeobachtung. In M. Beuthner & S. A. Weichert (Hrsg.), *Die Selbstbeobachtungsfalle. Grenzen und Grenzgänge des Medienjournalismus* (S. 13–41). Wiesbaden: VS Verlag für Sozialwissenschaften.

Brüggemann, M., Humprecht, E., Kleis Nielsen, R., Karppinen, K., Cornia, A. & Esser, F. (2016). Framing the Newspaper Crisis. *Journalism Studies, 17*(5), 533–551.

Donges, P. & Jarren, O. (2017). Strukturen politischer Kommunikation II: Medien und Mediensysteme. In P. Donges & O. Jarren (Hrsg.), *Politische Kommunikation in der Mediengesellschaft: Eine Einführung* (S. 61–74). Wiesbaden: Springer Fachmedien.

Drentwett, C. (2009). *Vom Nachrichtenvermittler zum Nachrichtenthema: Metaberichterstattung bei Medienereignissen*. Wiesbaden: VS Verlag für Sozialwissenschaften.

Dybski, W., Hanel, K., Kringe, A., Peun, K. & Weiß, R. (2010). Ideologie vor Eigennutz? *Publizistik, 55*(2), 173–192.

Eberwein, T. (2010). Von „Holzhausen" nach „Blogville" – und zurück Medienbeobachtung in Tagespresse und Weblogs. In T. Eberwein & D. Müller (Hrsg.), *Journalismus und Öffentlichkeit: Eine Profession und ihr gesellschaftlicher Auftrag* (S. 143–165). Wiesbaden: VS Verlag für Sozialwissenschaften.

Engels, K. (2005). Zwischen Ökonomisierung und Kollegenorientierung: Zur organisatorischen und beruflichen Institutionalisierung des Medienjournalismus. In M. Beuthner & S. A. Weichert (Hrsg.), *Die Selbstbeobachtungsfalle. Grenzen und Grenzgänge des Medienjournalismus* (S. 99–118). Wiesbaden: VS Verlag für Sozialwissenschaften.

Esser, F. & D'Angelo, P. (2003). Framing the Press and the Publicity Process: A Content Analysis of Meta-Coverage in Camapign 2000 Network News. *American Behavioral Scientist, 46*(5), 617–641.

Esser, F. & D'Angelo, P. (2006). Framing the press and publicity process in U.S., British, and German General election campaigns: A comparative study of metacoverage. *Harvard International Journal of Press/Politics, 11*(3), 44–66.

Esser, F., Reinemann, C. & Fan, D. (2001). Spin doctors in the United States, Great Britain, and Germany: Metacommunication about media manipulation. *Harvard International Journal of Press/Politics, 6*(1), 16–45.

Esser, F., Schwabe, C. & Wilke, J. (2005). Metaberichterstattung im Krieg. Wie Tageszeitungen die Rolle der Nachrichtenmedien und der Militär-PR in den Irakkonflikten 1991 und 2003 framen. *M&K Medien & Kommunikationswissenschaft, 53*(2–3), 314–332.

Fengler, S. (2002). *Medienjournalismus in den USA*. Konstanz: UVK.

Fengler, S. (2016). Verantwortung und Selbstkontrolle im Journalismus. In K. Meier & C. Neuberger (Hrsg.), *Journalismusforschung: Stand und Perspektiven* (2, S. 183–200). Baden-Baden: Nomos.

fög. (2015). Abstimmungsmonitor. Vorlagen vom 14. Juni 2015. Verfügbar unter: http://www.foeg.uzh.ch/dam/jcr:00000000-0777-18fa-ffff-ffffbbe1f70e/Abstimmungsmonitor_Juni_2015.pdf [Zugriff: 08.09.2020].

fög. (2018). Abstimmungsmonitor. Vorlagen vom 4. März 2018. Verfügbar unter: https://www.foeg.uzh.ch/dam/jcr:0a7ad23e-d48b-48f8-92cb-2acb88a7e29d/Abstimmungsmonitor_M%C3%A4rz_2018.pdf [Zugriff: 08.09.2020].

Freedman, D. (2008). *The politics of media policy*. Cambridge, UK & Malden, MA: Polity Press.

Freedman, D. (2010). Media policy silences: The hidden face of communications decision making. *The International Journal of Press/Politics, 15*(3), 344–361.

Gilens, M. & Hertzman, C. (2000). Corporate ownership and news bias: Newspaper coverage of the 1996 telecommunications act. *The Journal of Politics, 62*(2), 369-386.

Hackett, R. A. & Uzelman, S. (2003). Tracing corporate influences on press content: a summary of recent NewsWatch Canada research. *Journalism Studies, 4*(3), 331–346.

Hagen, L. M. (1992). Die opportunen Zeugen. Konstruktionsmechanismen von Bias in der Zeitungsberichterstattung über die Volkszählungsdiskussion. *Publizistik, 37*(4), 444–460.

Jarren, O. (1988). Medienkritik und medienbezogene Berichterstattung in Tageszeitungen. Ursachen und Begründungen für ein Defizit. In Bundeszentrale für politische Bildung (Hrsg.), *Medienkritik im Blickpunkt. Plädoyer für eine engagierte Programmkritik* (Bd. 261, S. 90–112). Bonn.

Jarren, O. (1998). Medienpolitische Kommunikation. In O. Jarren, U. Sarcinelli & U. Saxer (Hrsg.), *Politische Kommunikation in der demokratischen Gesellschaft: Ein Handbuch mit Lexikonteil* (S. 616–629). Wiesbaden: VS Verlag für Sozialwissenschaften.

Johnson, T. J., Boudreau, T. & Glowaki, C. (1996). Turning the spotlight inward: How five leading news organizations covered the media in the 1992 presidential election. *Journalism & Mass Communication Quarterly, 73*(3), 657–671.

Kemner, B., Scherer, H. & Weinacht, S. (2008). Unter der Tarnkappe. *Publizistik, 53*(1), 65–84.

Kreitling, H. (1998). Blinde Flecken. *Journalist, 3*(1998), 31–33.

Krüger, U. M. & Müller-Sachse, K. H. (1998). *Medienjournalismus: Strukturen, Themen, Spannungsfelder*. Opladen: Westdeutscher Verlag.

Kweon, S. (2000). A framing analysis: How did three US News magazines frame about mergers or acquisitions? *International Journal on Media Management, 2*(3-4), 165–177.

Lichtenstein, D. (2011). Kommerzialisierung des Medienjournalismus? Eine empirische Untersuchung zum „Fall Berliner Zeitung“. *M&K Medien & Kommunikationswissenschaft, 59*(2), 216–234.

Löblich, M. (2011). Frames in der medienpolitischen Öffentlichkeit. *Publizistik, 56*(4), 423–439.

Maier, D. & Dogruel, L. (2016). Akteursbeziehungen in der Zeitungsberichterstattung über die Online-Aktivitäten des öffentlich-rechtlichen Rundfunks. *Publizistik, 61*(2), 145–166.

Malik, M. (2004). *Journalismusjournalismus: Funktion, Strukturen und Strategien der journalistischen Selbstthematisierung*. Wiesbaden: VS Verlag für Sozialwissenschaften.

Malik, M. (2005). Stars, Skandale, Sensationen und immer an den Leser denken. Entscheidungskriterien und Thematisierungsstrategien des Medienjournalismus. In M. Beuthner & S. A. Weichert (Hrsg.), *Die Selbstbeobachtungsfalle. Grenzen und Grenzgänge des Medienjournalismus* (S. 45–62). Wiesbaden: VS Verlag für Sozialwissenschaften.

McChesney, R. W. (2008). *The political economy of media: Enduring issues, emerging dilemmas*. New York, NY: NYU Press.

Müller, D. & Donsbach, W. (2006). Unabhängigkeit von wirtschaftlichen Interessen als Qualitätsindikator im Journalismus. In S. Weischenberg, W. Loosen & M. Beuthner (Hrsg.), *Medien-Qualitäten: Öffentliche Kommunikation zwischen ökonomischem Kalkül und Sozialverantwortung* (S. 129–147). Konstanz: UVK.

Neverla, I. (2019). Medienkritik und Medienjournalismus. Über Herausforderungen der (Selbst-) Reflexion in der mediatisierten Gesellschaft. *ComSoc Communicatio Socialis, 52*(1), 7–18.

Page, B. I. (1996). The Mass Media as Political Actors. *PS: Political Science and Politics, 29*(1), 20–24.

Pfetsch, B. (2003). Symbolische Geräusche über die Anderen – Die Öffentlichkeit über Medienpolitik in Pressekommentaren. *M&K Medien & Kommunikationswissenschaft, 51*(2), 232–329.

Pointner, N. (2010). *In den Fängen der Ökonomie? Ein kritischer Blick auf die Berichterstattung über Medienunternehmen in der deutschen Tagespresse*. Wiesbaden: VS Verlag für Sozialwissenschaften.

Pratte, A. & Whiting, G. (1986). What newspaper editorials have said about deregulation of broadcasting. *Journalism Quarterly, 63*(3), 497–502.

Ruß-Mohl, S. (1999). (Selbst-)Steuerung des Mediensystems durch Medienjournalismus und Medien-PR. In K. Imhof, O. Jarren & R. Blum (Hrsg.), *Steuerungs- und Regelungsprobleme in der Informationsgesellschaft* (S. 197-207). Wiesbaden: VS Verlag für Sozialwissenschaften.

Schejter, A. M. & Obar, J. A. (2009). Tell it not in Harrisburg, publish it not in the streets of Tampa. *Journalism Studies, 10*(5), 577–593.

Schweizer, C. (2019). Texts as data II: Media content analysis. In H. Van den Bulck, M. Puppis, K. Donders & L. Van Audenhove (Hrsg.), *The Palgrave Handbook of Methods for Media Policy Research* (S. 263–276). Cham: Springer International Publishing.

Snider, J. H. & Page, B. I. (1997). Does media ownership affect media stands? The case of the telecommunications act of 1996. *Institute for Policy Resarch at Northwestern University* (IPR working papers 97–12).

Tonndorf, K. (2015). Bürgerrecht vs. Urheberrecht: der öffentliche Interessenskonflikt um ACTA und seine Darstellung in der deutschen Medienberichterstattung. In M. Emmer & C. Strippel (Hrsg.), *Kommunikationspolitik für die digitale Gesellschaft* (Bd. 1, S. 205–224). Berlin.

Turow, J. (1994). Hidden conflicts and journalistic norms: The Case of Self-Coverage. *Journal of Communication, 44*(2), 29–46.

Uzelman, S., Hackett, R. A. & Stewart, J. (2005). Covering democracy's forum: Canadian press treatment of public and private broadcasting. *Critical Studies in Media Communication, 22*(2), 156–169.

Weischenberg, S. (2004). *Journalistik: Medienkommunikation: Theorie und Praxis* (3. Auflage Bd. Band 1: Mediensysteme—Medienethik—Medieninstitutionen). Wiesbaden: VS Verlag für Sozialwissenschaften.

Weiß, H.-J. (1985). Die Tendenz der Berichterstattung und Kommentierung der Tagespresse zur Neuordnung des Rundfunkwesens in der Bundesrepublik Deutschland (Oktober 1984 bis Januar 1985). Ergebnisse einer quantitativen Inhaltsanalyse. *Media Perspektiven, 12*(1985), 845–866.

Weiß, H.-J. (1986). Rundfunkinteressen und Pressejournalismus. Abschließende Analysen und Anmerkungen zu zwei inhaltsanalytischen Zeitungsstudien. *Media Perspektiven, 2*(86), 53–73.

Weiß, H.-J. (1988). Meinungsgestaltung im Interesse der Zeitungen? Eine Analyse der Zeitungspublizistik zur Erhöhung der Rundfunkgebühr (Oktober 1987 bis Januar 1988). *Media Perspektiven, 8*(1988), 469–489.

Winter, C. & Buschow, C. (2014). Medienmanagement und Journalismus – Befragungsergebnisse im Kontext aktueller Herausforderungen. In F. Lobigs & G. v. Nordheim (Hrsg.), *Journalismus ist kein Geschäftsmodell: Aktuelle Studien zur Ökonomie und Nicht-Ökonomie des Journalismus* (1, S. 31–56). Baden-Baden: Nomos.

Wise, D. & Brewer, P. R. (2010). News about news in a presidential primary campaign: Press metacoverage on evening news, political talk, and political comedy programs. *Atlantic Journal of Communication, 18*(3), 127–143.

Wyss, V., Schanne, M. & Stoffel, A. (2012). Medienkritik in der Schweiz – Eine Bestandesaufnahme. *Qualität der Medien - Schweiz – Suisse – Svizzera. Jahrbuch 2012*, 361–376.

Stefano Pedrazzi is a research and teaching assistant and doctoral student at the Department of Communication and Media Research at the University of Fribourg. His research activities focus on questions relating to media governance, algorithms and social bots.

Content Analysis in Research on Fiction/ Entertainment in the Media [Die Inhaltsanalyse in der Forschung zu fiktionalen Medieninhalten]



Content Analysis in the Research Field of Fictional Entertainment

Cordula Nitsch

1 Introduction

Fictional entertainment accounts for a large share of the overall media content and is very popular with the audience. It is highly diverse in form and content, and differs, for example, regarding media type, genre, and target group. Fictional entertainment comprises novels (e.g., thriller, romance), comic books, TV series (e.g., crime series, daily soaps, medical shows, political drama), children's programs, feature films, cartoons, box office hits, audio plays, etc. Research on fictional entertainment typically concentrates on audiovisual productions, i.e. TV series and movies. It stems from different scientific disciplines (e.g., film studies, cultural studies, communication science, and political science) that apply their specific perspectives and methods.

In communication science, research activities regarding TV series and movies often draw on cultivation theory. Developed by George Gerbner in the late 1960 s, cultivation theory posits that television is "the common socializer of our times" (Gerbner et al. 1980, p. 14) and plays a central role in shaping people's perceptions of reality. Early cultivation research was concerned with television violence. Combining content analysis (message system analysis) and survey data (cultivation analysis), Gerbner and his team showed that violence is massively overrepresented on television and that heavy TV users especially perceived the world as more dangerous and crime-filled than it really is (e.g., Gerbner and Gross 1976; Gerbner et al. 1978).

C. Nitsch (✉)
Universität Augsburg, IMWK, Augsburg, Deutschland
E-Mail: cordula.nitsch@phil.uni-augsburg.de

F. Oehmer-Pedrazzi et al. (Hrsg.), *Standardisierte Inhaltsanalyse in der Kommunikationswissenschaft – Standardized Content Analysis in Communication Research,* https://doi.org/10.1007/978-3-658-36179-2_23

The initial focus on violence has been expanded to various other aspects of social reality (e.g., gender roles, minorities, occupations, politics, and health related topics). Fictional media content is thus of interest to many subfields of communication science (e.g., health communication, political communication, gender studies). So far, numerous studies have pointed out that the fictional TV world presents a distorted picture of reality. Apart from the high amount of violence, this concerns, for example, the underrepresentation and stereotypical depiction of women, old people, and minorities, the overrepresentation of certain occupations such as doctors or lawyers, and the stereotypical depiction of illnesses. Overviews of specific topics provide helpful summaries on the state of the art (on mental illness, e.g., Ma 2015; Wahl 2003; on race and sex, e.g. Signorielli 2016).

2 Common Research Designs

Academic research is mostly interested in the content and effects of fictional entertainment. Effect studies typically resort to standardized surveys (e.g. Gerbner and Gross 1976; Minnebo and Eggermont 2007) or apply experimental settings (e.g., Holbrook and Hill 2005; Nitsch and Wünsch 2016). Some scholars also focus on the production side. They conduct interviews with creators, writers, and producers of fictional media content and provide insights into the inner workings of the television and movie industry (e.g., Cantor 2015; Coleman 2008; Kirby 2013; Klein 2011). As for content analyses, both standardized and qualitative approaches are used to analyze fictional entertainment formats. Qualitative approaches comprise textual analyses (e.g., Corner and Richardson 2007; Foss 2012; Ortner 2007; Streiff and Dundes 2017), discourse analyses (e.g., Behera 2015; Wiedemann 2018) and generic analyses (e.g., van Zoonen and Wring 2012). So far, combinations of standardized and qualitative content analyses (e.g., Chesebro 2003; Diriks et al. 2012; Lacalle and Gómez 2016) remain the exception.

Standardized content analyses of TV series and movies differ greatly regarding the analyzed material. Some scholars conduct case studies and analyze individual TV series (e.g., Blanco-Herrero and Rodríguez-Contreras 2019; Eilders and Nitsch 2010; Holbert et al. 2005). Rather common are studies on individual genres such as crime fiction (e.g., Dirikx et al. 2012; Parrott and Parrott 2015), medical shows (e.g., Hetsroni 2009; McLaughlin 1975; Rossmann 2003), daily soaps (e.g., Pelka and Michel 2005) or productions for children (e.g., Hefner et al. 2017; Hendriyani et al. 2016; Martins and Wilson 2012). Other studies comprise a broad range of fictional productions (e.g., Eilders and Nitsch 2015; Gerbner et al. 1980; Igartua et al. 2014) or focus on (prime-time) programming as a whole, thus including both fictional and non-fictional media content (e.g., Chory-Assad and Tamborini 2001; Daalmans et al. 2017; Gerbner et al. 1978).

Inspired by cultivation theory, some studies compare their results to real-life data and point to significant distortions regarding the depiction of crime (e.g., Brown

2001), age structures (e.g., Gerbner et al. 1980), gender distribution (e.g., Prommer and Linke 2019), occupations (e.g., Gehrau 2014) or tobacco use (e.g., Hazan et al. 1994). Other studies focus on comparisons between different fictional genres (e.g., Bilandzic et al. 2017; Krüger 2005) or compare the fictional depictions to the news media (e.g., Daalmans et al. 2017; Nitsch et al. 2021). Longitudinal studies are less common than cross-sectional, but give interesting insights into how the fictional depiction has changed (or remained stable) over time (e.g., Lichter et al. 2000; Paasch-Colberg and Küfner 2012; Signorielli 1989a, b). Cross-country comparisons that try to detect national specifics in the fictional material (e.g., Nitsch and Eilders 2015; Götz et al. 2018) are relatively rare.

Since studies on fictional entertainment often position themselves in the context of cultivation research, combinations of content analysis with surveys are common (e.g., Diefenbach and West 2001, 2007; Gehrau 2014; Lücke 2007; Miller and Reeves 1976; Signorielli 1989b). However, even if content analysis is applied as the only method, scholars usually discuss their results' implications for potential effects on the audience's perceptions and attitudes (e.g., Aley and Hahn 2020; Nitsch et al. 2021). The analyses of TV series and movies typically rely on manual coding; automated content analyses (e.g., Geena Davis Institute on Gender in Media 2016; Ramakrishna et al. 2017) are not yet established.

3 Main Constructs Employed in Standardized Content Analyses on TV Series and Movies

Content analyses of TV series and movies apply different units of analysis. Coding is frequently done on the level of characters, with some studies distinguishing between major and minor characters (e.g., Gerbner et al. 1980; Hendriyani et al. 2016). Other common units of analysis are the scene and the program, i.e. the (episode of a) TV-series or the movie as such. In rare cases, studies resort to secondary information for coding the relevant variables, for example, to written summaries (Eilders and Nitsch 2014, 2015; Nitsch and Eilders 2014).

Studies on fictional entertainment usually analyze the frequency of occurrence of certain topics (e.g., violence, alcohol use) and characters (e.g., men and women, minorities) and/or how these phenomena and characters are depicted (**attributes/stereotypes**). The analyses focus on countless aspects, including the representation of **morality** (e.g., Bilandzic et al. 2018; Daalmans et al. 2017; Dirikx et al. 2012), sexuality (e.g., Dillman Carpentier et al. 2017; Timmermans and van den Bulck 2018), family (e.g., Lacalle and Hidalgo-Marí 2016; Scherer et al. 2005), or accents (Dragojevic et al. 2016). However, the main thematic research foci, constructs and results can be summarized as follows:

1. *Representation of violence:* Since cultivation theory initially focused on the depiction of violence, a lot of research has analyzed the amount of violence in fictional entertainment (e.g., Gerbner and Gross 1976; Gerbner et al. 1978). In terms of crime types, studies distinguish between violent crime and property crime (burglary) and find violent crime to be overrepresented and burglary to be underrepresented (Diefenbach and West 2001). Other scholars distinguish between social and physical aggression in children's programs (Martins and Wilson 2012). Studies also examine the characteristics of perpetrators and victims in terms of gender, age and race (e.g., Gerbner and Gross 1976; Gerbner et al. 1978; Parrott and Parrott 2015), showing that white female characters stand the greatest chance of being victims of crime.
2. *Sociodemographic characteristics of fictional characters:* The majority of studies that deal with characteristics of the fictional characters focuses on gender representations. These studies point to a striking underrepresentation of women in fictional entertainment, which remains stable over time (e.g., González-de Garay et al. 2020; Prommer and Linke 2019; Signorielli 1989b; Sink and Mastro 2017). Women are also occupied in less qualified professions and are often associated with domestic work (e.g., González-de Garay et al. 2020; Miller and Reeves 1976). For princess characters in recent Disney Movies, however, Hine and colleagues (2018) note a positive change since they find a balanced depiction of masculine and feminine character traits. Closely related to gender is the category age of the fictional characters. People of age are generally less likely to appear on screen, and this is even more true for women (e.g., Gerbner et al., 1980; Prommer and Linke 2019). Apart from gender and age, scholars are interested in the fictional depiction of race and minorities (e.g., Banks 1977; Mastro and Greenberg 2000). Immigrants, for example, are underrepresented and negatively depicted in Spanish TV fiction (Igartua et al. 2012). For a popular German crime series, Paasch-Colberg and Küfner (2012) note that migrants increased over time and are mostly shown to be well integrated.
3. *Representation of occupations:* Scholars are also interested in the frequency and attributes of occupations in fictional entertainment. The professional world as shown in TV series and movies does not resemble real-life. Whereas occupations related to law and order or to health and medicine are clearly overrepresented, many other occupations are practically invisible (e.g., DeFleur 1964; Gehrau 2014; Krüger 2005). Studies that concentrate on individual occupations are interested in attributes such as character traits and sociodemographic characteristics. Most of these studies analyze the portrayal of doctors (sometimes including additional health-related professions). They reveal that doctors are presented in a very positive light (e.g., McLaughlin 1975; Rossmann 2003; Turow and Coe 1985), however, at least in U.S. fiction this positive depiction declines over time (e.g., Pfau et al. 1995; Chory-Assad and Tamborini 2001). Other studies investigate the depiction of politicians (e.g., Holbert et al. 2005; Lichter et al. 2000; Nitsch and Eilders 2015), lawyers (e.g., Pfau et al. 1995), or police officers (e.g., Dirikx et al. 2012).

4. *Representation of health-related aspects:* Health-related aspects account for another research focus and comprise many different aspects. Apart from the above-mentioned depiction of health related professions, scholars investigate, for example, the depiction of illnesses. Studies demonstrate that dramatic and acute illnesses dominate over chronic illnesses in the fictional world (Hetsroni 2009; Turow and Coe 1985) and that mental illness and mentally ill characters are negatively stereotyped (e.g., Diefenbach and West 2007; Elsayed 2015; Signorielli 1989a). Content analyses on the portrayal of alcohol, illicit drugs and tobacco compare the prevalence of users to real-life statistics, between countries, and over time, and also relate the use of these substances to sociodemographic characteristics (e.g., Barker et al. 2019; Chapoton et al. 2019; Hazan et al. 1994; Long et al. 2002; Russel and Russel 2009). Other scholars analyze the fictional depiction of nutrition (Kaufman 1980; Lücke 2007), of physical activity (Gietzen et al. 2017) or of vaccination (McClaran and Rhodes 2020).
5. *Representation of politics and political characters:* TV series and movies can also be analyzed regarding their political intensity and their **degree of realism** (e.g. Eilders and Nitsch 2014, 2015; Nitsch and Eilders 2014). With regard to **political topics,** studies consider their centrality in individual scenes and distinguish between the three dimensions polity (institutional and normative infrastructure), policy (political issues), and politics (decision-making processes, power relations). They typically find a strong focus on politics and very little attention to polity (Eilders and Nitsch 2010; Nitsch and Eilders 2015; Nitsch, et al. 2021; Jandura et al. 2016). The coding of **political characters** is not necessarily restricted to professional politicians (see above) but comprises civilian sector employees and state officials (e.g., Eilders and Nitsch 2015; Lichter et al. 2000) or even ordinary citizens who are performing a political action, for example voting or speaking about politics (e.g., Eilders and Nitsch 2010; Nitsch and Eilders 2015). Whereas analyses that consider a broad spectrum of fictional material reveal a negative portrayal of politicians (e.g., Lichter et al. 2000), political dramas tend to portray politicians in a positive light, i.e. as hard working and committed to the common good (e.g., Holbert et al. 2005; Nitsch and Eilders 2015).

4 Research Desiderata

Research on TV series and movies provides us with many insights into how fictional entertainment presents certain aspects of reality. Since this is of interest to many scientific disciplines, studies are somewhat scattered across numerous journals, which aggravates obtaining an overview on the relevant publications. Thus, it would be helpful to have more systematic literature overviews that structure the state of research for the different thematic fields (e.g., occupations/gender etc. in fictional entertainment), and that contain information on the analyzed material and applied variables.

The vast majority of analyzed TV series and movies are U.S. productions. This is due to both a high number of American studies and the fact that American TV series and movies are likely to be broadcast in other countries, too. There is a particular lack of studies on fictional entertainment of non-Western countries and cross-country comparisons. Since cross-country comparisons can reveal interesting national specifics (e.g., Chapoton et al. 2019; Götz et al. 2018), future research should also consider the respective origin of the fictional productions.

In addition, research on fictional entertainment would benefit from extending its focus beyond TV series and movies. Future studies may analyze, for example, new digital formats such as web series and compare the results to televised fiction. Moreover, non-audiovisual media content deserves more attention in standardized content analysis. Audio books are so far only considered in qualitative content analyses (e.g., Strohmeier 2005), and there are only a few examples of standardized content analyses of printed entertainment such as novels (e.g., Nitsch 2011; Zerges 1977). An interesting approach to fictional entertainment is furthermore the recent study by Aley and Hahn (2020) that analyzes gender depictions in posters for children's movies.

Relevant Variables in DOCA—Database of Variables for Content Analysis

Actors/characters: https://doi.org/10.34778/3a
Political topics: https://doi.org/10.34778/3b
Degree of realism: https://doi.org/10.34778/3c

References

Aley, M. & Hahn, L. (2020). The powerful male hero: A content analysis of gender representation in posters for children's animated movies. *Sex Roles*, *83*, 499–509.

Banks, C. A. M. (1977). A content analysis of the treatment of black Americans on television. *Social Education, 41*(4), 336–339.

Barker, A. B., Whittamore, K., Britton, J., Murray, R. L., & Cranwell, J. (2019). A content analysis of alcohol content in UK television *Journal of Public Health, 41*(3), 462–469.

Behera, H. K. (2015). Representation of gender roles in the media: An analysis of gender discourse in Sex and City movies. *American Research Thoughts, 1*(8), 1775–1795.

Bilandzic, H., Hastall, M. R., & Sukalla. F. (2017). The morality of television genres. Norm violations and their narrative context in four popular genres of serial fiction. *Journal of Media Ethics, 32*(2), 99–117.

Blanco-Herrero, D., & Rodríguez-Contreras, L. (2019). The risks of new technologies in Black Mirror: A content analysis of the depiction of our current socio-technological reality in a TV series. TEEM'19: Proceedings of the Seventh International Conference on Technological Ecosystems for Enhancing Multiculturality, 899–905.

Brown, N. J. (2001). A comparison of fictional television crime and crime index statistics, *Communication Research Reports, 18*(2), 192–199.

Cantor, M. (2015). *The Hollywood TV producer. His work and his audience*. New Brunswick, N.J.: Transaction Publishers [first published 1971].

Chapoton, B., Werlen, A.-L., & Regnier Denois, V. (2019). Alcohol in TV series popular with teens: a content analysis of TV series in France 22 years after a restrictive law, *European Journal of Public Health, 30*(2), 363–368.

Chesebro, J. W. (2003). Communication, values, and popular television series. A twenty-five year assessment and final conclusions. *Communication Quarterly, 51*(4), 367–418.

Chory-Assad, R. M., & Tamborini, R. (2001). Television doctors: An analysis of physicians on fictional and non-fictional television programs. *Journal of Broadcasting & Electronic Media, 45*(3), 499–521.

Coleman, S. (2008). The depiction of politicians and politics in British soaps. *Television & New Media, 9*(3), 197–219.

Corner, J., & Richardson, K. (2007). Political culture and television fiction: The Amazing Mrs Pritchard. *European Journal of Cultural Studies*, 11(4), 387–403.

Daalmans, S. Hijmans, E., & Wester, F. (2017). From good to bad and everything in between: An analysis of genre differences in the representation of moral nature. J*ournal of Media Ethics, 32*(1), 28–44.

DeFleur, M. L. (1964). Occupational roles as portrayed on television. *Public Opinion Quarterly, 28*(1), 57–74.

Diefenbach, D. L., & West, M. D. (2001). Violent crime and Poisson regression: A measure and a method for cultivation analysis. J*ournal of Broadcasting & Electronic Media, 45*(3), 432–445.

Diefenbach, D. L., & West, M. D. (2007). Television and attitudes toward mental health issues: Cultivation analysis and the third-person effect. *Journal of Community Psychology, 35*(2), 181–195.

Dillman Carpentier, F. R., Stevens, E. M., Wu, L., & Seely, N. (2017). Sex, love, and risk-n-responsibility: A content analysis of entertainment television. *Mass Communication and Society, 20*(5), S. 686–709.

Dirikx, A., van den Bulck, J., & Parmentier, S. (2012). The police as societal moral agents: „Procedural justice“ and the analysis of police fiction. *Journal of Broadcasting & Electronic Media, 56*(1), 38–54.

Dragojevic, M., Mastro, D., Giles, H., & Sink, A. (2016). Silencing nonstandard speakers: A content analysis of accent portrayals on American primetime television. *Language in Society, 45*, 59–85.

Eilders, C. & Nitsch, C. (2010). ‚Du glaubst auch alles, was die Dir vor der Wahl noch so verzapfen…‘ Die Bundestagswahlen 1987 bis 2005 in der Lindenstraße [‚You really believe anything they say before the election...' The Bundestag elections 1987 to 2005 in Lindenstraße]. In K. D. Felsmann (eds). *Die Bedeutung der Unterhaltungsmedien für die Konstruktion des Politikbildes*, (pp. 137–186). München: kopaed.

Eilders, C., & Nitsch, C. (2014). Politikvermittlung zwischen „Traumschiff“ und „The West Wing“: Ein Vorschlag zur Systematisierung von Fernsehserien [Political depictions between „Traumschiff“ and „The West Wing“: A proposal for a systematization of TV series]. In M. Dohle & G. Vowe (Hrsg.), *Politische Unterhaltung – Unterhaltende Politik. Forschung zu Medieninhalten, Medienrezeption und Medienwirkungen* (pp. 138–162). Köln: Herbert von Halem.

Eilders, C., & Nitsch, C. (2015). Politics in fictional entertainment: An empirical classification of movies and TV series. *International Journal of Communication*, 9, 1563–1587.

Elsayed (2015). Schizophrenia in Hollywood movies. *Journal of Mass Communication and Journalism, 5*(5), 1–4.

Foss, K. A. (2012). “That's not a beer bong, it's a breast pump!” Representations of breastfeeding in prime-time fictional television. *Health Communication, 28*(4), 329–340.

Geena Davis Institute on Gender in Media (2016). *The reel truth: Women aren't seen or heard. An automated analysis of gender representation in popular films. Retrieved from* https://seejane.org/wp-content/uploads/gdiq-reel-truth-women-arent-seen-or-heard-automated-analysis.pdf

Gehrau, V. (2014). Kultivierung von Berufsvorstellungen durch Fernsehen bei Jugendlichen [Cultivation of professional ideas through television among young people]. *Medien und Kommunikationswissenschaft, 62*(3), 417–438.

Gerbner, G., & Gross, L. (1976). Living with television: The violence profile. *Journal of Communication, 32*(2), 100–127.

Gerbner, G., Gross, L., Jackson-Beeck, M., Jeffries-Fox, S., & Signorielli, N. (1978). Cultural indicators: Violence profile No. 9. *Journal of Communication, 28*(3), 176–207.

Gerbner, G., Gross, L., Signorielli, N., & Morgan, M. (1980). Aging with television: Images of television drama and conceptions of social reality. *Journal of Communication, 30*(1), 37–47.

Gietzen, M. S., Gollust, S. E., Linde, J.A., Neumark-Sztainer, D., & Eisenberg, M.E. (2017). A content analysis of physical activity in TV shows popular among adolescents. *Res Q Exerc Sport, 88*(1), 72–82.

Götz, M., Hofmann, O., Mendel, C., Lemish, D., Scherr, S., Gozansky, Y., Huang, K., Prommer, E., Russo-Johnson, C., Sanabria, E., & Whitaker, L. (2018). Whose story is being told? Results of an analysis of Children's TV in 8 countries. *Televizion, 31*, 61–65.

Gonzáles-de Garay, B., Marcos-Ramos, M., & Portillo-Delgado, C. (2020). Gender representation in Spanish prime-time TV series. *Feminist Media Studies*, *20*(3), 414–433.

Hazan A. R., Lipton, H.L., & Glantz, S.A. (1994). Popular films do not reflect current tobacco use. *American Journal of Public Health, 84*(6), 998–1000.

Hefner, V., Firchau, R., Norton, K., & Shevel, G. (2017). Happily Ever After? A Content Analysis of Romantic Ideals in Disney Princess Films. *Communication Studies, 68*(5), 511–32.

Hendriyani, Hollander, E., d'Haenens, L. & Beentjes, J.W.J. (2016). Changes in cultural representations on Indonesian children's television from the 1980s to the 2000s. *Asian Journal of Communication, 26*(4), 371–386.

Hetsroni, A. (2009). If you must be hospitalized, television is not the place: Diagnoses, survival rates and demographic characteristics of patients in TV hospital dramas. *Communication Research Reports, 26*(4), 311–322.

Hine, B., England, D., Lopreore, K., Skora Horgan, E., & Hartwell, L. (2018). The rise of the androgynous princess: examining representations of gender in prince and princess characters of Disney movies released 2009–2016. *Social Sciences, 7*(12), 245.

Holbert, R. L., Tschida, D. A., Dixon, M., Cherry, K., Steuber, K., & Airne, D. (2005). The West Wing and depictions of the American presidency: Expanding the domains of framing in political communication. *Communication Quarterly, 53*(4), 505–522.

Holbrook, R.A., & Hill, T.G. (2005). Agenda-setting and priming in prime time television: Crime dramas as political cues. *Political Communication, 22*(3), 277–295.

Igartua, J., Barrios, I. M., Ortega, F., & Frutos, F. J. (2014). The image of immigration in fiction broadcast on prime-time television in spain. *Palabra Clave, 17*(3), 589–618.

Igartua, J. J., Barrios, I., & Ortega, F. (2012). Analysis of the image of immigration in prime time television fiction. *Comunicacion y Sociedad 25,*(2), 5–28.

Jandura, O., Gladitz, P., & Nitsch, C. (2016). Parlamente in non-fiktionalen und fiktionalen Angeboten. Was man in „Berlin direkt" und „Borgen" über parlamentarische Abläufe erfährt [Parliaments in non-fictional and fictional formats. What we learn about parliamentary procedures in "Berlin direkt" and "Borgen". *Publizistik, 61*(3), 287–304.

Kaufman, L. (1980). Prime-time nutrition. *Journal of Communication, 30*(3), 37–46.

Kirby, D. A. (2013). Forensic fictions: Science, television production, and modern storytelling. S*tudies in History and Philosophy of Science Part C: Studies in History and Philosophy of Biological and Biomedical Sciences, 44*(1), 92–102.

Klein, B. (2011). Entertaining ideas: social issues in entertainment television. *Media, Culture & Society, 33*(6), 905–921

Krüger, U. M. (2005). Berufe im Fernsehen. Pilotstudie 1. [Occupations on Television. Pilot study 1]. In: W. Dostal & L. Troll (Hrsg.), *Die Berufswelt im Fernsehen* (pp. 19–154). Nürnberg: Präzis Druck.

Lacalle, C. & Gómez, B. (2016). The representation of women in the family in Spanish television fiction. *Communication & Society 29*(3), 1–14.

Lacalle, C. & Hidalgo-Marí, T. (2016). Evolution of family representations in Spanish fiction television. *Revista Latina de Comunicación Social, 71*, 470–483.

Lichter, S. R., Lichter, L. S., & Amundson, D. (2000). Government goes down the tube: Images of government in TV entertainment, 1955-1998. *Harvard International Journal of Press/Politics, 5*(2), 96–103.

Long, J. A., O'Connor, P. G., Gerbner, G., & Concato, J. (2002). Use of alcohol, illicit drugs, and tobacco among characters on prime-time television. *Substance Abuse, 23*(2), 95–103.

Lücke, S. (2007). *Ernährung im Fernsehen. Eine Kultivierungsstudie zur Darstellung und Wirkung [Nutrition on television. A cultivation study on presentation and effects].* Wiesbaden: Springer VS.

Ma, E. (2015). Schizophrenia in Hollywood movies. *Journal of Mass Communication & Journalism, 5*(5), 1-4.

Martins, N. & Wilson, B. J. (2012). Mean on the screen: Social aggression in programs popular with children. *Journal of Communication, 62*(6), 991–1009.

Mastro, D. E. & Greenberg, B. S. (2000). The portrayal of racial minorities on prime time television. *Journal of Broadcasting & Electronic Media, 44*(4), 690–703.

McClaran, N. & Rhodes, N. (2020). Portrayals of vaccination in entertainment television: A content analysis. *Health Communication*, *36*(10), 1242–1251.

McLaughlin, J. (1975). The doctor shows. *Journal of Communication, 25*(3), 182–184.

Miller, M. M. & Reeves, B. (1976): Dramatic TV content and children's sex-role stereotypes. *Journal of Broadcasting, 20*(1), 35–50

Minnebo, J., & Eggermont, S. (2007). Watching the young use illicit drugs. Direct experience, exposure to television and the stereotyping of adolescents' substance use. *Young. Nordic Journal of Youth Research, 15*(2), 129–144.

Nitsch, C. (2011). *Journalistische Realität und Fiktion. Eine empirische Analyse des Fernsehjournalismus in deutschen und US-amerikanischen Romanen (1970–2005) [Journalistic reality and fiction. An empirical analysis of television journalism in German and US-American novels (1970–2005)].* Köln: Halem.

Nitsch, C. & Eilders, C. (2014). Die Repräsentation von Politik in fiktionaler Unterhaltung. Instrument, Anwendung und Befunde zur Systematisierung von Filmen und Fernsehserien [The representation of politics in fictional entertainment. Instrument, application and results for a systematization of films and TV series]. *Studies in Communication | Media, 3*(1), 120–143.

Nitsch, C. & Eilders, C. (2015). Fictional politics on TV: Comparing the representations of political reality in the US-series "The West Wing" and the German series "Kanzleramt". *Global Media Journal. German Edition, 5*(1), 1–19.

Nitsch, C., Jandura, O., & Bienhaus, P. (2021). The democratic quality of political depictions in fictional TV-entertainment. A comparative content analysis of the political drama Borgen and the journalistic magazine Berlin direkt. *Communications. The European Journal of Communication Research, 46*(1), 74–94.

Nitsch, C. & Wünsch, C. (2016). Fiktionale Videomalaise? Ein Prolonged-Exposure-Experiment zur Wirkung von fiktionalen Politikdarstellungen auf die Politikverdrossenheit der Rezipienten [Fictional video-malaise? A prolonged exposure experiment on the effects of fictional political representations on recipients' disenchantment with politics]. In M. Czichon, C. Wünsch, & M. Dohle (Hrsg.), *Rezeption und Wirkung fiktionaler Medieninhalte* (pp. 113–134). Baden-Baden: Nomos.

Ortner, C. (2007). Tatort: Migration. Das Thema Einwanderung in der Krimireihe Tatort [Crime Scene: Migration. The topic of immigration in the crime series „Tatort“]. *Medien & Kommunikationswissenschaft, 55*(1), 5–23.

Paasch-Colberg, S. & Küfner, A. (2012). Zur Repräsentationsleistung von Fernseh-Fiktion. Die Darstellung von Migranten im Tatort der Jahre 1970 bis 2009 [The representational performance of television fiction. The representation of migrants in "Tatort" between 1970 and 2009]. *Medien & Kommunikationswissenschaft, 60*(3), 392–413

Parrott, S. & Parrott, C. T. (2015): U.S. television's "mean world" for white women: The portrayal of gender and race on fictional crime dramas. *Sex Roles 73*(1), 70–82.

Pelka, B. & Michel, L. P. (2005). Die Darstellung von Berufen im Fernsehen und ihre Auswirkungen auf die Berufswahl. Pilotstudie 2 [The representation of professions on television and its impact on career choice. Pilot study 2]. In: W. Dostal & L. Troll (Hrsg.): Die Berufswelt im Fernsehen. (pp. 155–193) Nürnberg: Präzis Druck.

Pfau, M., Mullen, L. J., & Garrow, K. (1995). The influence of television viewing on public perceptions of physicians. *Journal of Broadcasting & Electronic Media, 39*(4), 441–458.

Pfau, M., Mullen, L. J., Deidrich, K., & Garrow, K. (1995). Television viewing and public perceptions of attorneys. *Human Communication Research*, *21*(3), 307–330.

Prommer, E. & Linke, C. (2019). *Ausgeblendet. Frauen im deutschen Film und Fernsehen.* Köln: Halem.

Ramakrishna, A., Martínez, V. R., Malandrakis, N., Singla, K., & Narayanan, S. (2017). Linguistic analysis of differences in portrayal of movie characters. *Proceedings of the 55th Annual Meeting of the Association for Computational Linguistics (ACL)*, 1669–1678.

Rossmann, C. (2003). Zu Risiken und Nebenwirkungen fragen Sie die Patienten. Eine Studie zur Darstellung von Ärzten in Krankenhausserien und ihrem Einfluss auf das Arztbild von Patienten [Ask patients about risks and side effects. A study on the depiction of doctors in hospital series and its influence on patients' image of doctors]. *Medien und Kommunikationswissenschaft, 51*(3–4), 497–522.

Russell, C. A., & Russell, D. W. (2009). Alcohol messages in prime-time television series. *Journal of Consumer Affairs, 43*(1), 108–128

Scherer, H., Schneider, B., Gonser, N., & Roßa, P. (2005). *Familienbilder und Familienthemen in fiktionalen und non-fiktionalen Fernsehsendungen. Teilstudie „Programmanalyse". Abschlussbericht. [Family images and family themes in fictional and non-fictional television programs. Sub-study "Program Analysis". Final report].* Retrieved from http://www.bmfsfj.de/RedaktionBMFSFJ/Abteilung2/Pdf-Anlagen/tv-familienbilder-abschlussbericht,property=pdf,bereich=bmfsfj,sprache=de,rwb=true.pdf

Signorielli, N. (1989a). The stigma of mental illness on television. *Journal of Broadcasting and Electronic Media, 33*(3), 325–331.

Signorielli, N. (1989b). Television and conceptions about sex roles. Maintaining conventionality and the status quo. *Sex Roles, 21*(5–6), 341–360.

Signorielli, N. (2016). Race and sex in prime time: Five decades of research. In R. A. Lind (ed.). *Race and Gender in Electronic Media. Content, Context, Culture* (pp. 21–37). New York: Routledge.

Sink, A. & Mastro, D. (2017). Depictions of gender on primetime television. A quantitative content analysis. *Mass Communication & Society, 20*(1), 3–22.

Streiff, M. & Dundes, L. (2017). Frozen in time: How Disney gender-stereotypes its most powerful princess. *Social Sciences, 6*(2), 38, 1–10.

Strohmeier, G. (2005). Politik bei Benjamin Blümchen und Bibi Blocksberg [Politics in „Benjamin Blümchen" and „Bibi Blocksberg"]. *Aus Politik und Zeitgeschichte, 41*, 7–15.

Timmermans, E. & van den Bulck, J. (2018). Casual sexual scripts on the screen: A quantitative content analysis. *Archives of Sexual Behavior, 47*(1), 1481–1496.
Turow, J. & Coe, L. (1985). Curing television's ills: The portrayal of health care. *Journal of Communication, 35*(4), 36–51.
van Zoonen, L. & Wring, D. (2012). Trends in political television fiction in the UK: Themes, characters and narratives, 1965–2009. *Media, Culture and Society, 34*(3), 263–279.
Wahl, O. (2003). Depictions of mental illnesses in children's media. *Journal of Mental Health, 12* (3), 249–258.
Wiedemann, T. (2018). Discursive practice in Combat Girls: The construction of social reality in contemporary German film. *Studies in European Cinema, 16*(2), 126–140.
Zerges, K. (1977). Literatur in der Massenpresse [Literature in the mass press]. In H. Kreuzer (Hrsg.), *Literaturwissenschaft – Medienwissenschaft* (pp. 103–121). Heidelberg: Quelle & Meyer.

Dr. Cordula Nitsch is a senior researcher at the Department of Media, Knowledge and Communication at the University of Augsburg, Germany. She holds a PhD in Communication Science from the University of Augsburg. Her research focuses on political entertainment and digital media/digital stress.



Content Analysis in the Research Field of Satire

Dennis Lichtenstein und Cordula Nitsch

1 Introduction

Satire is a communication style that is typically associated with aggression, judgement, mockery, play, laughter, and references to societal norms (Behrmann 2002; Brummack 1971; Day 2011; Simpson 2003; Test 1991). It provides social commentary and criticism, attacks power structures, and can add to controversial societal debates. Satirists are often perceived as credible sources and can serve as opinion leaders for the audience (Crittenden et al. 2011). Without a doubt, satire is an integral part of the communicative structures of today's political systems (Dörner and Porzelt 2016).

Even though satire is a cross-media phenomenon, research activities thereon concentrate on television, where satirical shows have become increasingly popular during the last decade. Studies stem from numerous scientific disciplines such as communication science, political science, sociology, cultural studies, and social psychology. In communication science, satire and humor are approached by different subfields, for example, health communication (Aust, von Hirschhausen and Fischer 2018; Schwarz and Reifegerste 2019), science communication (Bore and Reid 2014;

D. Lichtenstein (✉)
Market and Audience Insights (MAI), Deutsche Welle, Bonn, Germany
E-Mail: dennis.lichtenstein@dw.com

C. Nitsch
Universität Augsburg, IMWK, Augsburg, Deutschland
E-Mail: cordula.nitsch@phil.uni-augsburg.de

F. Oehmer-Pedrazzi et al. (Hrsg.), *Standardisierte Inhaltsanalyse in der Kommunikationswissenschaft – Standardized Content Analysis in Communication Research,* https://doi.org/10.1007/978-3-658-36179-2_24

Feldman et al. 2011; Pinto and Riesch 2017), and studies on social protest (Bore et al. 2017; Graefer et al. 2019). Most studies, however, relate to political communication and journalism studies. By building on considerations on infotainment that deal with a softening of news, these studies usually take a normative perspective and are interested in whether satire helps or hurts democracy (Otto et al. 2017). As a specific type of infotainment, satire is associated with a lack of quality and substance and is often expected to contribute to political cynicism (e.g., Brants 1998; Hart and Hartelius 2007; Prior 2007). More recent works, however, emphasize that infotainment formats present news in an understandable and attractive way and can substantially contribute to public opinion formation (Baum 2003; Holbert 2013; Wessler 2018). Some authors regard satirical TV-shows as a (quasi-)journalistic media format that provides information and orientation, thus fulfilling normative functions of the public sphere (e.g., Baym 2005; McClennen and Maisel 2014).

Satire as a research area comprises effects studies, communicator studies and content analyses. Effects studies account for the main share and concentrate on the impact of satirical shows on learning and attitudes as well as on the elaboration of satirical messages (e.g., Becker and Bode 2018; Boukes et al. 2015; LaMarre and Grill 2019; Nabi et al. 2007; for an overview see Becker 2013). Approaches that study the communicator's side are relatively rare. However, qualitative interviews with satirists (Farjami 2017; Handelman 1984; Koivukoski and Ödmark 2020; Lichtenstein et al. 2021) and quantitative surveys (Knieper 2002; Riffe et al. 1985, 1987) give interesting insights into motivations and role concepts of this profession. Content analyses, which are usually interested in the depiction of topics and (political) actors, have significantly increased over the last years.

2 Common Research Designs

The vast majority of content analyses on satire concentrates on satirical TV-shows. Only few studies examine podcasts (Ödmark 2018) or other online outlets (Malmqvist 2015; Schwarzenegger and Wagner 2018; Tang and Bhattacharya 2011; Yang and Jiang 2015). Occasionally, satirical shows are compared to the coverage of news media outlets (Fox et al. 2007; Lichtenstein and Koerth 2020; Ödmark 2018; Nitsch and Lichtenstein 2019; Young 2013). Combinations of content analyses and surveys, focus group discussions, interviews or experimental designs (Bore and Reid 2014; Matthes and Rauchfleisch 2013; Morris 2009; Young 2004, 2006, 2013) are relatively rare.

The lion's share of studies focuses on the U.S. where the format of late-night comedy goes back to the launch of *Tonight!* in 1954. Recent research on American shows concentrates on *The Late Show, The Tonight Show, The Colbert Report* and *The Daily Show.* Only a few content analyses address European satirical outlets, e.g., Germany (Emde and Scherer 2016; Lichtenstein and Nitsch 2018; Nitsch and Lichtenstein, 2013), Switzerland (Matthes & Rauchfleisch 2013) and Sweden (Ödmark 2018), or shows in other world regions such as Australia (Harrington 2011). Comparative research between

countries is scarce. An important exception is a special issue of *Popular Communication: The International Journal of Media and Culture* that introduces satirical shows of different countries in single chapters (Baym and Jones 2012). Even though the articles do not entail a systematic comparison, the special issue clearly demonstrates that news satire is a globalized format with adaptions to country-specific news formats and audience expectations. Long-term projects that enable for comparisons over time are rare (Becker and Goldberg 2017; Lichter et al. 2015) and many studies from the U.S. are constrained to presidential election campaigns (Fox et al. 2007; Young 2004).

Analyses of satirical content conduct either qualitative or standardized content analyses. Qualitative analyses deal with stylistic aspects such as irony and exaggeration (e.g., Warner 2007) and discursive modes in interviews (Baym 2010). Furthermore, they entail discourse analyses on specific satirical events such as “Varoufake” presented by Jan Böhmermann in Germany (Bessant 2017) or the dealing of Irish satire with the country’s economic crash during the financial crisis (Boland 2012). Some studies examine the type of humor as well as the use of news clips and sound bites from the news media in single formats, for example *The Daily Show* (Baym 2005; Jones 2005) or the German *heute show* (Kleinen-von Königslöw and Keel 2012). Still, manual standardized content analyses are more common than qualitative studies. At the beginning, standardized content analyses dealt with rather basic variables such as topics and actors; recent studies also include frames and more evaluative variables. Automatic content analyses of satirical media content (Becker and Goldberg 2017) are the exception so far.

3 Constructs Employed in Standardized Content Analyses on Satire

Frequent coding units in content analyses on satirical TV-shows are jokes, thematic segments, political actors and guest interviews. Jokes, such as one-liners in late-night comedy-monologues, are the smallest unit of analysis. They are particularly appropriate for the analysis of stand-ups, and are operationalized as verbal statements about a target that prompt laughter from the audience (Farnsworth and Lichter 2020; Lichter et al. 2015; Matthes and Rauchfleisch 2013; Morris 2009; Niven et al. 2003; Young 2004). In the coding of thematic segments or stories (Brewer and Marquart 2007; Feldman 2013; Lichtenstein and Nitsch 2018), both formal and content-related criteria can be used to distinguish between segments of satirical shows. Formal criteria refer to changes in the setting (e.g., from a monologue to a film sequence or an interview), content-related criteria to changes of the main topic (Lichtenstein and Nitsch 2018). For the coding of guest interviews, the whole interview serves as the coding unit.

Despite different research interests and levels of analysis, existing studies on satire can be summarized regarding several main constructs and results.

1. *Stylistic aspects:* Fox et al. (2007) categorize humor and differentiate between joking and laughing. Whereas funny music, silly statements, voices or gestures and obviously altered images are indicators for joking, laughing is indicated by sounds of laughter or chuckling, smiling and eye crinkling. Coding of stylistic aspects is also directed to footage and sound bites from television news programs (Brewer and Marquart 2007). Consistent with results from qualitative content analyses (Baym 2005; Jones 2005), these indicators point to a relatively high share of recycled news media content in *The Daily Show* (Brewer and Marquart 2007).
2. *Political actors:* Several studies analyze which individuals or collective actors are addressed as **targets of jokes** (Farnsworth and Lichter 2020; Lichtenstein and Nitsch 2018; Lichter et al. 2015; Nitsch and Lichtenstein 2013; Niven et al. 2003; Young 2004). Overall, satirical shows tend to personalization and repetition of jokes: individual actors are more often addressed than institutions or other collective actors and similar jokes are directed at different candidates or presidents. For U.S. late-night comedies, studies demonstrate a strong similarity regarding their attention to political actors. As humor comprehension requires at least some familiarity or knowledge about political actors, all shows rely on jokes on the most prominent politicians, i.e. presidents and political candidates as well as their families (Lichter et al. 2015; Niven et al. 2003; Young 2004) and focus mainly on national politicians. In Germany, the spectrum of politicians in satirical shows is noticeably larger (Nitsch and Lichtenstein 2013) than in the U.S. This can be explained by the political multi-party system that, opposed to the American two-party system, prevents paying attention to only two candidates.
3. *Evaluations of political actors:* Not surprisingly, criticism is more common than praise in the **evaluation of political actors** (Lichtenstein and Nitsch 2018). Scholars are also interested in the reference points of the evaluations. They differentiate whether the evaluations relate to role specific characteristics (e.g., leadership quality, political expertise) or political irrelevant aspects such as politicians' private life and outward appearance (Emde and Scherer 2016; Lichtenstein and Nitsch 2018; Nitsch and Lichtenstein 2013). Studies also distinguish between different tones of humor: Besides policy-based jokes on political actors, complimentary, self-deprecating, physical, stereotypical, dismissive or character-based jokes are coded (Matthes and Rauchfleisch 2013; Morris 2009). According to the findings, American shows have a low share of policy-related jokes and focus predominantly on personal traits, self-deprecation, and stereotypes (Lichter et al. 2015; Niven et al. 2003; Young 2004). Opposed to that, policy-based jokes on political actors and role specific evaluations outweigh personal and politically irrelevant evaluations in European satirical shows (Lichtenstein and Nitsch 2018; Matthes and Rauchfleisch 2013).
4. *Topics of satirical shows:* Many studies examine the topics that are addressed in satirical shows and measure the relative share of political topics (Brewer and Marquart 2007; Lichtenstein and Nitsch 2018; Lichter et al. 2015; Nitsch and Lichtenstein 2013; Young 2004). In focusing on institutional politics, they use a

rather narrow definition of political topics. Comparisons of satirical shows reveal that political topics are very pronounced in news satire and political cabaret, late-night comedy is more concerned with societal and media topics, people and conflicts (Lichtenstein and Nitsch 2018; Young 2004). In line with this, Lichtenstein and Nitsch (2018) found strong differences for the degree of given political (background) information.

5. *Framing of politics and political topics:* Analyses on the **framing of politics** differentiate between issue frames and strategy or game frames (Brewer and Marquart 2007; Fox et al., 2007). They find a high share of issue frames that parallels the depiction in the news media. However, issue-specific studies (Feldman 2013: global warming; Nitsch and Lichtenstein 2019: international crises; Lichtenstein and Koerth 2020: Ukraine crisis; Young 2013: Occupy Wall Street) reveal differences to news media discourses. Nitsch and Lichtenstein (2019) examine satirical shows' positions towards the frames. They find that the shows address but dismiss frame elements that are known from the news media and tend to support frame elements that play a minor role in news media discourses.
6. *Expression of opinion:* Some studies examine how satirical shows take a stance on political issues. Young (2013) coded the general tonality of satirical shows towards Occupy Wall Street. She found a considerable gap between a general positive tonality towards the movement and the depiction of delegitimizing frames, and concludes that irony is used to challenge news media frames. Satirical shows contain many comments on political topics but differ in the degree to which they take a stand towards political topics. While news satire and political cabaret express explicit and argument-based positions, late-night comedy remains rather implicit by using mockery and exaggeration (Lichtenstein and Nitsch 2018).
7. *Coding of guests in satirical shows:* Studies that deal with the coding of guests in the shows include manual coding of professions (Brewer and Marquart 2007) as well as automatic content analysis based on keywords and summaries of the episodes on Wikipedia (Becker and Goldberg 2017). Overall, journalists and artists are the most frequent guests in American shows; political guests make up 15 to 20 percent. Despite differences between the shows, half of the interviews address political topics (Brewer and Marquart 2007). Feldman (2013) coded the guests' position towards global warming. She reveals that "the shows are friends to global warming activists, environmental policy makers, scientists, and science writers" (Feldman 2013, p. 445); guests who are dismissive or neutral of climate change issues are in the minority.

4 Research Desiderata

Research on the content of satire has provided us with numerous insights into the depiction of political and societal issues and actors. However, the focus on satirical TV-shows and the limitation of analyses to one or a few shows from a single country

leave many aspects yet to be studied. At the same time, new questions emerge due to the current rise of online satire and the blurring of boundaries between politics and satire. Three main aspects for further research on the content of satire can be emphasized:

First, comparative research on the content of satire is needed. *Cross-country comparisons* could shed light on how political and cultural conditions influence the content and normative role of satire. Such studies could also reveal international parallels and adaption processes. Within single countries, *media comparisons* can find out how media logics shape the satirical performance, e.g., in print, online, TV or radio formats. *Issue-specific comparisons between satire and news media* could broaden our knowledge on inter-media agenda setting and on how satirical interpretations diverge from the news media.

Second, we need more studies that combine content analyses with effect and reception studies. Triangulation between content analyses and experimental designs enables to measure effects of different content types and can thus provide a more nuanced knowledge about the impact of satire on democracy, health prevention and science communication. Since satirical content varies with regard to different satirical shows, it is vital to analyze whether or not this elicits different effects. Ambitious research endeavors should also delve into mutual reinforcing effects of news and satire over longer periods of time.

Third, standardized content analyses compromise the coding of challenging concepts such as irony, sarcasm, emotions and discursive modes in guest interviews. Triangulation with qualitative research can help to establish adequate categories and indicators. Also, instruments for the standardized coding of memes and other visual content that emerge with the rather new phenomenon of online satire are still missing.

Relevant Variables in DOCA—Database of Variables for Content Analysis

Targets of jokes: https://doi.org/10.34778/3i
Evaluation of political actors: https://doi.org/10.34778/3g
Framing of politics: https://doi.org/10.34778/3h

References

Aust, V., von Hirschhausen, E., & Fischer, F. (2018). Kommunikation über fehlende Evidenz in Schul- und Alternativmedizin: Welchen Beitrag kann das medizinische Kabarett leisten? [Communication about the lack of evidence in conventional and alternative medicine: What contribution can medical cabaret make?] In P. Stehr, D. Heinemeier, & C. Rossmann (eds.), *Evidenzbasierte | evidenzinformierte Gesundheitskommunikation* (pp. 241–252). Baden-Baden: Nomos.

Baum, M. A. (2003). Soft news and political knowledge: Evidence of absence or absence of evidence? *Political Communication, 20*(2), 173–190.

Baym, G. (2010). Political media as discursive modes: A comparative analysis of interviews with Ron Paul from Meet the Press, Tonight, The Daily Show, and Hannity. *International Journal of Communication, 7*, 489–507.

Baym, G. (2005). The Daily Show: Discursive integration and the reinvention of political journalism. *Political Communication, 22*(3), 259–276.

Baym, G. & Jones, J. P. (2012). News parody in global perspective: Politics, power, and resistance. *Popular Communication, 10*(2), 2–13.

Behrmann, S. (2002). *Politische Satire im deutschen und französischen Rundfunk [Political satire in German and French broadcasting]*. Würzburg: Königshausen & Neumann.

Becker, A. B. (2013). What about those interviews? The impact of exposure to political comedy and cable news on factual recall and anticipated political expression. *International Journal of Public Opinion Research, 25*(3), 344–356.

Becker, A. B. & Bode, L. (2018). Satire as a source for learning? The differential impact of news versus satire exposure on net neutrality knowledge gain. *Information, Communication & Society, 21(*4), 612–625.

Becker, A. B. & Goldberg, A. B. (2017). Entertainment, intelligent, or hybrid programming? An automated content analysis of twelve years of political satire interviews. *Atlantic Journal of Communication, 25*(2), 127–137.

Bessant, J. (2017). New politics and satire: the Euro financial crisis and the one-finger salute. *Information, Communication & Society, 20*(7), 1057–1072.

Boland, T. (2012). Critical comedy: Satire, absurdity and Ireland's economic crash. *Irish Political Studies, 27*(3), 440–456.

Bore, I.-L. K., Graefer, A., & Kilby, A. (2017). This pussy grabs back: Humour, digital affects and women's protest. *Open Cultural Studies, 1*, 529–540.

Bore, I.-L. K. & Reid, G. (2014). Laughing in the face of climate change? Satire as a device for engaging audiences in public debate. *Science Communication, 36*(4), 455–478.

Boukes, M., Boomgaarden, H. G., Moorman, M., & de Vreese, C. H. (2015). At odds: laughing and thinking? The appreciation, processing, and persuasiveness of political satire. *Journal of Communication, 65*(5), 721–744.

Brants, K. (1998). Who's afraid of infotainment? *European Journal of Communication, 13*(3), 315–335.

Brewer, P. R. & Marquardt, E. (2007). Mock news and democracy: Analyzing The Daily Show. *Atlantic Journal of Communication, 15*(4), 249–267.

Brummack, J. (1971). Zu Begriff und Theorie der Satire [On the concept and theory of satire]. *Deutsche Vierteljahrsschrift für Literaturwissenschaft und Geistesgeschichte, 45*(1), 275–277.

Crittenden, V. L., Hopkins, L. M., Simmons, J. M. (2011). Satirists as opinion leaders: is social media redefining roles? *Journal of Public Affairs, 11*(3), 174–180.

Day, A. (2011). *Satire and dissent. Interventions in contemporary political debates*. Bloomington: Indiana University Press.

Dörner, A. & Porzelt, B. (2016). Politisches Gelächter. Rahmen, Rahmung und Rollen bei Auftritten politischer Akteure in satirischen Interviews des deutschen Fernsehens [Political laughter. frame, framing and roles in performances of political actors in satirical interviews on German television]. *Medien & Kommunikationswissenschaft, 64*(3), 339–358.

Emde, K. & H. Scherer (2016). Politische vs. persönliche Kritik: Die Darstellung von Politikern in der Nachrichtensatire ‚heute-show' [Political vs. personal criticism: The portrayal of politicians in the news satire 'heute-show]. In P. Henn & D. Frieß (eds.), *Politische Online-Kommunikation. Voraussetzungen und Folgen des strukturellen Wandels der politischen Kommunikation* (pp. 119–139). Berlin: Böhland & Schremmer.

Farnsworth, S. J. & Lichter, S. R. (2020). *Late Night with Trump. Political humor and the American presidency*. New York: Routledge.
Farjami, M. (2017). *Iranian political satirists. Experience and motivation in the contemporary era.* Amsterdam: John Benjamins.
Feldman, L. (2013). Cloudy with a chance of heat balls: The portrayal of global warming on *The Daily Show* and *The Colbert Report*. *International Journal of Communication*, 7, 430–451.
Feldman, L., Leiserowitz, A., & Maibach, E. (2011). The science of satire: The Daily Show and The Colbert Report as sources of public attention to science and the environment. In A. Amarasingam (ed.), *The Stewart/Colbert Effect: Essays on the Real Impacts of Fake News*, (pp. 25–46). Jefferson, NC: McFarland and Company.
Fox, J. R., Koloen, G., & Sahin, V. (2007). No joke: A comparison of substance in The Daily Show with Jon Steward and broadcast network television coverage of the 2004 presidential election campaign. *Journal of Broadcasting and Electronic Media, 51*(2), 213–227.
Graefer, A., Kilby, A. & Bore, I-L. K. (2019). Unruly women and carnivalesque countercontrol: Offensive humor in mediated social protest. *Journal of Communication Inquiry, 43*(2), 171–193.
Harrington, S. (2011). The uses of satire: Unorthodox news, cultural chaos and the interrogation of power. *Journalism, 13*(1), 38–52.
Hart, R. P. & Hartelius, J. (2007). The political sins of Jon Stewart. *Critical Studies in Media Communication, 24*, 263–272.
Handelman, A. (1984). Political cartoonists as they saw themselves during the 1950s. *Journalism Quarterly, 61*(1), 137–141.
Holbert, R. L. (2013). Developing a normative approach to political satire: An empirical perspective. *International Journal of Communication*, 7, 305–323.
Jones, J. P. (2005). *Entertaining politics: New political television and civic culture*. Lanham, MD: Rowman & Littlefield.
Kleinen-von Königslöw, K. & Keel, G. (2012). Localizing The Daily Show: the heute show in Germany. *Popular Communication, 10*(2-3), 66–79.
Knieper, T. (2002). *Die politische Karikatur. Eine journalistische Darstellungsform und deren Produzenten [The political caricature. A journalistic form of representation and its producers].* Köln: Halem.
Koivukoski, J. & Ödmark, S. (2020, online first). Producing journalistic news satire: How nordic satirists negotiate a hybrid genre. *Journalism Studies, 21*(6), 731–747.
LaMarre, H. L. & Grill, C. (2019). Satirical narrative processing: Examining the roles of character liking and media enjoyment on narrative-consistent attitudes. *International Journal of Public Opinion Research, 31*(1), 142–160.
Lichtenstein, D. & Koerth, K. (2020, online first). Different shows, different stories: How German TV formats challenged the government's framing of the Ukraine crisis. *Media, War & Conflict*. doi: https://doi.org/10.1177/1750635220909977
Lichtenstein, D. & Nitsch, C. (2018). Informativ und kritisch? Die Politikdarstellung in deutschen Satiresendungen. [Information and criticism? The depiction of politics in German satirical shows]. *Medien & Kommunikationswissenschaft, 66*(1), 5–21.
Lichtenstein, D., Nitsch, C. & Wagner, A. J. M. (2021). Jokers or Journalists? A Study of Satirists' Motivations Role Orientations and Understanding of Satire. *Journalism Studies 22*(13), 1756–1774. https://doi.org/10.1080/1461670X.2021.1952476
Lichter, S., Baumgartner, J., & Morris, J. (2015). *Politics is a joke! How TV comedians are remaking political life*. Boulder, CO: Westview Press.

Matthes, J. & Rauchfleisch, A. (2013). The Swiss "Tina Fey Effect". The content of late-night political humor and the negative effects of political parody on the evaluation of politicians. *Communication Quarterly, 61*(5), 596–614.

McClennen, S. & Maisel, R. (2014). *Is satire saving our nation? Mockery and American politics.* New York, NY: Palgrave Macmillan.

Malmqvist, K. (2015). Satire, racist humour and the power of (un)laughter: On the restrained nature of Swedish online racist discourse targeting EU-migrants begging for money. *Discourse & Society, 26*(6), 733–753.

Morris, J. S. (2009). *The Daily Show with Jon Stewart* and audience attitude change during the 2004 party conventions. *Political Behavior, 31*(1), 79–102.

Nabi, R. L., Moyer-Gusé, E., & Byrne S. (2007) All joking aside: A serious investigation into the persuasive effect of funny social issue messages. *Communication Monographs, 74*(1), 29–54.

Nitsch, C. & Lichtenstein, D. (2019). Satirizing international crises. The depiction of the Ukraine, Greek debt and migration crises in political satire. *Studies in Communication Science (SComS), 19*(1), 85–103.

Nitsch, C. & Lichtenstein, D. (2013). Politik mal anders. Die Politikdarstellung in „Harald Schmidt" im Kontrast zur „Tagesschau" [A different look on politics. The depiction of politics in "Harald Schmidt" in contrast to "Tagesschau"]. *Publizistik, 58*(4), 389–407.

Niven, D., Lichter, S. R., & Amundson, D. (2003). The political content of late night comedy. *Harvard International Journal of Press/Politics, 8*, 118–133.

Ödmark, S. (2018, online first). Making news funny: Differences in news framing between journalists and comedians. *Journalism*.

Otto L., Glogger, I., Boukes, M. (2017). The softening of journalistic political communication—A critical review of sensationalism, soft news, infotainment, and tabloidization and a comprehensive framework model. *Communication Theory, 27*(2).

Pinto, B. & Riesch, H. (2017). Are audiences receptive to humour in popular science articles? An exploratory study using articles on environmental issues. *Journal of Science Communication, 16*(4), 1–15.

Prior, M. (2007). *Post-broadcast democracy: How media choice increases inequality in political involvement and polarizes elections*. Cambridge: Cambridge University Press.

Riffe, D., Sneed, D., & van Ommeren, R. (1987). Deciding the limits of taste in editorial cartooning. *Journalism Quarterly, 64*(2-3), 607–610.

Riffe, D., Sneed, D., & van Ommeren, R. (1985). How editorial page editors and cartoonists see issues. *Journalism Quarterly, 62*(4), 896–899.

Schwarz, U. & Reifegerste, D. (2019). Humorappelle in der Gesundheitskommunikation [Humor appeals in health communication]. In C. Rossmann & M. R. Hastall (eds.), *Handbuch der Gesundheitskommunikation. Kommunikationswissenschaftliche Perspektiven* (pp. 459–470). Wiesbaden: Springer VS.

Schwarzenegger, C. & Wagner, A. (2018). Can it be hate if it is fun? Discursive ensembles of hatred and laughter in extreme right satire on Facebook. *Studies in Communication and Media*, 7(4), 475–498.

Simpson, P. (2003). *On the discourse of satire: Towards a stylistic model of satirical humor*. Amsterdam/Philadelphia: John Benjamin Publishing.

Tang, L. & Bhattacharya, S. (2011). Power and resistance: A case study of satire on the internet. *Sociological Research Online*, *16*(2), 10–18.

Test, G. A. (1991). *Satire: Spirit and art*. Tampa, FL: University of South Florida Press.

Warner, J. (2007). Political culture jamming: The dissident humor of The Daily Show with Jon Stewart. *Popular Communication, 5*(1), 17–36.

Wessler, H. (2018). *Habermas and the media*. Cambridge: Polity Press.

Young, D. G. (2004). Late-night comedy in election 2000: Its influence on candidate trait ratings and the moderating effects of political knowledge. *Journal of Broadcasting and Electronic Media, 48*(1), 1–22.
Young, D. G. (2006). Late-night comedy and the salience of the candidates' caricatured traits in the 2000 election. *Mass Communication & Society, 9*(3), 339–366.
Young, D. G. (2013). Political satire and Occupy Wall Street: How comics co-opted strategies of the protest paradigm to legitimize a movement. *International Journal of Communication, 7*, 371–393.
Yang, G. & Jiang, M. (2015). The networked practice of online political satire in China: Between ritual and resistance. *International Communication Gazette,* 77(3), 215–231.

Dr. Dennis Lichtenstein is a senior researcher at Market and Audience Insights (MAI) at Deutsche Welle and senior lecturer at Zeppelin University Friedrichshafen. His research interests include conflict and crisis communication in transnational and national media discourses and infotainment in political satire and YouTube formats.

Dr. Cordula Nitsch is a senior researcher at the Department of Media, Knowledge and Communication at the University of Augsburg, Germany. She holds a PhD in Communication Science from the University of Augsburg. Her research focuses on political entertainment and digital media/digital stress.



Content Analysis in the Research Field of Video Games

Tim Wulf, Daniel Possler und Johannes Breuer

1 Introduction

Video games have become a major leisure activity for users of all ages, genders, and social groups (ESA 2019). The diversification of the player population is closely associated with an increasing diversity of games themselves. Technological developments like smartphones, tablet computers, virtual, and augmented reality have created possibilities for new types of video games which also have implications for research on this medium. While much of the empirical research on video games focuses on (potential) effects on the players (for an overview, see Klimmt and Possler 2020), there is a comparably smaller number of studies analyzing their content. One reason for this scarceness is that video games have a set of specific characteristics which make it challenging to adequately select and analyze their content. This chapter provides an

T. Wulf (✉)
Institut für Kommunikationswissenschaft und Medienforschung,
Ludwig-Maximilians-Universität München, Munich, Germany
E-Mail: tim.wulf@ifkw.lmu.de

D. Possler
Institut für Journalistik und Kommunikationsforschung,
Hochschule für Musik, Theater und Medien Hannover, Hannover, Germany
E-Mail: Daniel.Possler@ijk.hmtm-hannover.de

J. Breuer
GESIS – Leibniz Institute for the Social Sciences, Cologne, Germany
E-Mail: johannes.breuer@gesis.org

F. Oehmer-Pedrazzi et al. (Hrsg.), *Standardisierte Inhaltsanalyse in der Kommunikationswissenschaft – Standardized Content Analysis in Communication Research*, https://doi.org/10.1007/978-3-658-36179-2_25

overview of common research questions and methods of content-analytic work on video games. We will discuss the particular challenges for this line of research and provide suggestions on how to address them. Building on the overview chapter by Breuer and Quandt (2014), we will also review recent work (2014–2019) and discuss methodological developments and trends that may facilitate and extend content analyses of video games.

2 Main Constructs & Topics of Content Analyses of Video Games

Overall, content analyses of video games have mostly focused on content that might have a negative or detrimental impact on players, such as **violence** (e.g. Hartmann et al. 2014) or **stereotypical depictions of female characters** (e.g., Lynch et al. 2016) or, to a lesser degree, ethnic minorities (Dill et al. 2005). As discussed by Breuer and Quandt (2014), the findings of these studies are generally consistent. Most studies looking at violent content find a substantial amount of it in the video games they analyzed (see, e.g. Smith et al. 2003). Similarly, content analyses of gender stereotypes consistently find underrepresentation and stereotypical (typically also sexualized) depictions of female characters (Downs and Smith 2009; Ivory 2006; Lynch et al. 2016).

While in research on the effects of video games, a majority of the work has also focused on negative aspects (chiefly violence and excessive use), over the last decade, there has been an increased interest in serious games, i.e., “games with a purpose beyond play“ (Klopfer et al. 2009, p. 20) in communication research. Popular examples of such serious games include “*Darfur is Dying”, “Papers, Please”, “That Dragon, Cancer”,* or “*Re-Mission 2”*. However, to date there are only a few content analyses of serious games. One of the few examples is a study by Ratan and Ritterfeld (2009) in which the authors classified serious games based on their primary educational content (e.g., academic, occupation, or health), primary learning principle (e.g., practicing skills, cognitive or social problem solving), target age group, and game platform. More recently, Lu and Kharazzi (2018) analyzed the content of 1743 (serious) health games released between 1983 and 2016. In addition to attributes specific to this type of games, such as primary health topics and level of influence, they also looked at general characteristics, such as **genre**, character types, and setting. All in all, content analyses of the positive aspects of video games are still quite rare.

3 The Challenges of Doing Content Analyses of Video Games

Scholars aiming to content analyze video games are faced with particular challenges arising from the specific attributes of this medium. A key feature of video games that distinguishes them from other forms of media is their *interactivity* (Weber et al. 2014). Compared to linear media, such as movies, that can be described as pre-composed fixed messages, the

content of video games depends on the players' inputs which, in turn, are a function of various player-specific variables, such as skill, preferences (e.g., regarding the customization of their avatar), or playing style. Modern narrative games especially offer players large degrees of freedom and allow them to make decisions that have profound influence on the progression of the narrative. Hence, the content varies substantially between players and playing sessions. This challenge becomes even more pronounced for multiplayer games where in-game events depend on various players' decisions and skills. This can limit the generalizability of recorded content and may even result in biases (Schmierbach 2009). The research overview by Breuer and Quandt (2014) shows that considerable variation exists in the way content analyses of video games dealt with this issue. Especially the number of different players involved in such studies varies. Moreover, in some studies, players and coders of the material are the same person (e.g., Heintz-Knowles et al. 2001), while in other studies, players and coders are different people (e.g., Haninger and Thompson 2004).

Another set of challenges arises from the fact that video games are *complex* with regards to their structural features. While newspaper articles only consist of written text and movies can be analyzed by focusing on the audio and visual signals, video games come with a variety (and multitude) of content consisting of audio (music, spoken language/voice, and ambient noises), visual (anything happening on the screen), haptic (physical feedback) and textual stimuli. One implication of this complexity is that codebooks have to deal with and measure the various structural features of video games. Another challenge is that modern games tend to be quite long. A full playthrough can take dozens of hours. As recording and coding that much footage would take an enormous amount of time (especially if researchers want to analyze multiple games), studies typically sample parts of a game. In practice, studies use recordings of playing sessions of various duration, ranging from 10 min (Lachlan et al. 2005) to 20 min (Beasley and Collins Standley 2002) or even 60 min (Haninger and Thompson 2004). However, with such an approach, it is likely that the selected parts are not representative of the game as a whole. Especially the first parts of a game may not contain the specific types of content that researchers are interested in (e.g., there is no violent content because the first 10 or 20 min do not feature combat). Accordingly, the selection of a sample of game content can have strong impact on the results of the respective analysis. Studies have used different approaches to tackle some of these challenges. We will discuss some of these solutions and additional suggestions inspired by recent methodological developments in the field of communication research in the following.

4 How to Address Challenges in Content Analyses of Video Games?

A viable way of addressing some of the challenges discussed in the previous section is to use other sources than the game itself as coding material. The range of alternative coding materials used in content analyses of video games includes cover art and booklets

(Brand et al. 2003), ads (Scharrer 2004), and professional journalistic as well as user-generated game reviews (Ivory 2006; Zhu and Fang 2015). In Table 1, we provide an overview of the different types of coding material used for content analyses of video games. While all of these alternative coding materials avoid the issues related with the use of in-game material, they each come with their own set of limitations.

One type of materials that have been used more frequently in recent studies (Hartmann et al. 2014; Lynch et al. 2016) due to their inherent advantages are video recordings of people playing the games from *YouTube*. Another relevant platform that features a lot of video game content but has not yet been used in content-analytic studies is the live streaming platform *Twitch*. Both types of video platforms provide content produced by various people with different demographic characteristics, skills, and playing styles for the same game(s). Thus, using material from such platforms might help to identify differences in content between players without the need to let multiple people play the game in a lab setting. A particular advantage of *Twitch* is that the content is recorded live, meaning that it is not post-edited (in contrast to many *YouTube* videos). While using such platforms can reduce the costs and effort of producing the coding material, this approach also has certain limitations. People who watch video game videos on *YouTube* or *Twitch* typically do so to be entertained (Sjöblom and Hamari 2017; Wulf et al. 2018). Hence, the people producing the videos might, e.g., play in a way that is particularly entertaining to receive approval and popularity among viewers. They may also play in a different way because they are observed while playing and—if the content is streamed live—may be distracted from playing by interactions with their viewers. Of course, such "meta-comments", could also be of interest given that they can provide context for certain in-game decisions. Moreover, most streamers, many of whom make money with their videos, play popular "blockbuster" games (see for example, Wohn and Freeman 2020). Accordingly, there is less of this type of material researchers could use for analyzing more niche or serious games.

In general, when looking at the different options for coding materials, it is important to keep in mind that the quality of the material can differ largely and depends on their original purpose (e.g., advertising a game vs. critically reviewing it). We, therefore, suggest that researchers carefully evaluate which materials are most suitable for the specific research question(s) they are interested in. In addition, it may be advisable to systematically combine different materials in order to address some of the limitations of each individual type of material. For example, while *YouTube* footage may show how violence is visually represented in individual scenes, researchers may use additional material, such as a *Wikipedia* articles, walkthroughs, and strategy guides to get more information about, e.g., the narrative embedding of the violence (e.g., Hartmann et al. 2014).

Table 1 Overview of coding materials used for content analyses of video game (own representation)

Material	Reference(s)	Strengths	Limitations
Video game recording (various length)	(Lachlan et al. 2005; Shibuya and Sakamoto 2005; Smith et al. 2003)	Actual audiovisual content from the game; visual and audio material can be coded	Content may vary across players; if content is sampled, the representativeness of the material for the whole game is unsure
Packaging of games	(Provenzo 1992)	No variation between players	Intended to advertise the product; only limited impressions of the game
Handbook(s) of the game	(Brand and Knight 2005)	Official material; no variation between players; focus on core elements of the story	Limited impressions of the game; today, most games come without classical handbooks
Ads (printed)	(Scharrer 2004)	Official material; no variation between players	Intended to advertise the product; limited impressions of the game; often no actual pictures of game content
Professional reviews	(Ivory 2006; Miller and Summers 2007)	Cover many different aspects of a game; typically standardized evaluations of specific game features (e.g., graphics or story)	Subjectivity of reviewers; specific focus by reviewers; often limited information about the story (to avoid spoilers)
User reviews	(Zhu and Fang 2015)	Focus on central features of the game	Subjectivity of reviewers; reflect subjective playing experience; of varying length/ detail and quality
YouTube recordings	(Hartmann et al. 2014; Lynch et al. 2016)	No variation between players (if videos from the same person are used) or sampling of different players possible	Depend on skills and interests of particular players about whom researchers have no or only very limited information; content focus depends on video genre (e.g., speed run, walk-through, highlight video)
Pictures in print magazines	(Dill and Thill 2007)	Visual material; no variation between players	Only snapshot impressions of a game; contextual information (e.g., narrative) missing
Intro sequences	(Jansz and Martis 2007)	First impression of a game regarding the tone, story and aesthetics; no variation between players	Content can be quite different in the actual game; only non-interactive part of the game considered

(Fortsetzung)

Table 1 (Fortsetzung)

Material	Reference(s)	Strengths	Limitations
Wikipedia and other online encyclopedias (e.g., fan wikis)	(Breuer et al. 2012; Hartmann et al. 2014)	Often contain more detailed plot descriptions than reviews and provide structured factual information about a game	Degree of detail various substantially across sources and individual entries

5 Research Desiderata and Outlook

Based on our review of the existing literature and in light of recent methodological developments in the field of communication as a whole, we identified several desiderata for future content analysis of video games. These include substantive as well as methodological aspects. On the substantive side, a step forward would be to broaden the topical scope and investigate aspects beyond the "negative content patterns" (Smith 2006, p. 57) of violence and sexism. Broadening the topical scope would also necessitate the inclusion of other types of games than the ones that are typically studied in analyses of violent or sexist content. While shooter or action games have been investigated in many existing studies, family-friendly and casual games, including popular titles, such as those from the "*Super Mario*" series, or successful mobile games, such as "*Pokémon Go*" or "*Candy Crush*", have received considerably less attention so far. This is all the more remarkable as recent studies showed beneficial effects of such video games on well-being, recovery, and the fulfillment of psychological needs (e.g., Koban et al. 2019; Wulf et al. 2019). One potential reason why these games have been largely neglected in content analyses is that many of them feature less narrative content than, e.g., a role-playing or action adventure game. Importantly, however, the content of a video game is not just its narrative but also its playing mechanisms. Investigating these in content analyses may, e.g., help to better understand why people keep playing a particular game (which is also highly relevant for research on excessive use) or which particular features of a game can have a positive effect on well-being of their players. In addition to that, there are many topics which are neither clearly socially desirable (like learning or well-being) nor undesirable (like violence and sexism) that would be interesting to investigate in systematic content analysis. Content analyses of video games could, for example, look at portrayals of social concepts, such as politics, family, the role of science in society, or the portrayal of specific historical periods.

As stated before, another potential venue for content-analytic work on video games is to also look (more) at the structural and technological features of games instead of just focusing on the narrative content. Research of this type could, for example, look at differences and changes in interaction mechanisms (e.g., the number of players

involved, competition vs. cooperation), or the use of novel technologies, such as virtual or augmented reality in video games. In general, the rapid technological developments are something that researchers have to keep abreast of. These changes lead to coding schemes becoming quickly outdated. In practice, this means that it can become difficult to apply coding schemes from earlier studies to new analyses. While some consistency is desirable to allow for comparisons across time, the nature of the medium makes frequent adaptations necessary.

Regarding the methods employed in content analyses of video games, we would like to encourage researchers to further explore and exploit the potentials of alternative coding materials (i.e., materials other than actual in-game footage). The use of reviews of video games seems especially promising as these are available for almost all games and from a huge variety of players. Moreover, researchers may address some of the limitations listed in Table 1 by using multiple instances of the same type of coding material for the same game. For example, while one user review may be heavily distorted due to the individual preferences of the author, several hundreds of reviews on the very same game should offer a much more diverse perspective. In order to collect and analyze such large data sets, researchers may use computational methods (van Atteveldt and Peng 2018). To gather large amounts of material from online sources, researchers can use automated procedures, such as crawling and scraping techniques or make use of the application programming interfaces (APIs) provided by some gaming websites (Possler et al. 2019). For example, Zhu and Fang (2015) collected nearly 700,000 user reviews from three gaming websites using a web crawler. Subsequently, scholars can apply several forms of automated content analysis methods to analyze the gathered (textual) data (Grimmer and Stewart 2013), such as text mining, natural language processing, and supervised (e.g., Naive Bayes classifier) and unsupervised (e.g., Topic Models) machine learning (ML) techniques. In a recent study, Wang and Goh (2020) used topic modeling — an unsupervised ML method to uncover the thematic structure of texts (Blei 2012) — to identify central topics in a collection of more than 9,300 user-generated game reviews published on amazon.com. While the main aim of this study was to present a general overview of the topics of reviews, the method could also be used to uncover and compare the most prominent topics in discussions about specific games. So far, automated procedures have mostly been used to analyze user reviews. However, we suggest that they may also be useful when working with other textual material describing video game content, such as (online) encyclopedia entries, walkthroughs or strategy guides. Moreover, audio tracks of game recordings could be transformed to texts and subsequently analyzed by using automated transcription tools (e.g., the YouTube captioning engine; Bokhove and Downey 2018). Finally, researchers could also make use of recent methodological developments for the automated analysis of visual content (for an overview, see Geise et al. 2016). At least for still images there are many ready-to-use implementations of computer vision libraries (e.g., for object or facial recognition) for commonly used programming languages like Python or R. Large-scale analysis of screenshots or ads could make use of such techniques as well. It should be kept in

mind, however, that all of these automated methods have their own pitfalls. Concerns exist regarding the completeness and potential biases of computational data gathering techniques (Possler et al. 2019) as well as the validity of automated content analysis (e.g., Grimmer and Stewart 2013). Therefore, we, suggest that scholars carefully evaluate the individual benefits and weaknesses of these methods for their respective research question(s) and ideally combine different methods of gathering and analyzing data.

Altogether, we believe that using a combination of (a) different coding materials (e.g., professional and user reviews or reviews and wiki entries) and (b) different analysis methods (e.g., supervised machine learning approaches and topic models) is an approach that has great potential to further advance the field of content analyses of video games. Studies combining different sources can also be used to systematically compare the potentials and limitations of the respective types of coding materials.

Summing up, there is no single "best practice" for content analyses of video games. The specific characteristics of the medium, namely its interactivity and structural complexity, as well as its rapid technological development make it especially difficult to identify or define standards for content analyses of video games. In practice, this means that content analyses of video games vary substantially with regard to the sampling strategies, coding materials, coding schemes, and analysis methods they employ. Unlike the methodological approaches, the topical foci have been surprisingly consistent across the decades (from the earliest works in the 1980s until today). The large majority of content analyses of video games have focused on what Smith (2006) has called "negative content patterns" (p. 57), most commonly violence and sexism. The advent of research on so-called serious games from the mid-2000s onwards has also brought about some content-analytic work in that area. However, those studies are still few and far between. Broadening the thematic scope of content analyses of video games is an important desideratum for future research.

Given the substantial challenges that arise if researchers want to produce their own coding materials from the games themselves, we believe that the use of external sources of coding material is an especially useful approach. In addition to materials that have been used in previous studies, such as magazine articles or ads, reviews from players are a very promising source of coding material as they are widely available online and can be analyzed using computational methods. Finally, we suggest that future content-analytic research on video games could also make use of video material from streaming platforms like *Twitch* and automated analysis of visual (image) content.

Relevant Variables in DOCA—Database of Variables for Content Analysis

Violent acts: https://doi.org/10.34778/3d
Video game genre: https://doi.org/10.34778/3f
Sexualization: https://doi.org/10.34778/3e

References

Beasley, B., & Collins Standley, T. (2002). Shirts vs. skins: Clothing as an indicator of gender role stereotyping in video games. *Mass Communication and Society*, *5*(3), 279–293.

Blei, D. M. (2012). Probabilistic topic models. *Communications of the ACM*, *55*(4), 77.

Bokhove, C., & Downey, C. (2018). Automated generation of 'good enough' transcripts as a first step to transcription of audio-recorded data. *Methodological Innovations*, *11*(2).

Brand, J., & Knight, S. (2005). The narrative and ludic nexus in computer games: Diverse worlds II. *Proceedings of DiGRA 2005 Conference: Changing Views - Worlds in Play*. http://summit.sfu.ca/item/209

Brand, J., Knight, S., & Majewski, J. (2003). The diverse worlds of computer games: A content analysis of spaces, populations, styles and narratives. *Proceedings of DiGRA 2003: Level Up, September 2003*.

Breuer, J., Festl, R., & Quandt, T. (2012). Digital war: An empirical analysis of narrative elements in military first-person shooters. *Journal of Gaming & Virtual Worlds*, *4*(3), 215–237.

Breuer, J., & Quandt, T. (2014). Methodische Herausforderungen bei der Inhaltsanalyse von Computer- und Videospielen [Methodological challenges in the content analysis of computer and video games]. In K. Sommer, M. Wettstein, W. Wirth, & J. Matthes (Eds.), *Methoden und Forschungslogik der Kommunikationswissenschaft* (Vol. 11, pp. 145–161). Herbert von Halem Verlag.

Dill, K. E., Gentile, D. A., Richter, W. A., & Dill, J. C. (2005). Violence, sex, race, and age in popular video games: Implications for gender socialization and aggressive behavior. In E. Cole & D. J. Henderson (Eds.), *Featuring females: Feminist analyses of the media* (pp. 115–130). American Psychological Association.

Dill, K. E., & Thill, K. P. (2007). Video game characters and the socialization of gender roles: Young people's perceptions mirror sexist media depictions. *Sex Roles*, *57*(11–12), 851–864.

Downs, E., & Smith, S. L. (2009). Keeping abreast of hypersexuality: A video game character content analysis. *Sex Roles*, *62*(11–12), 721–733.

ESA (Entertainment Software Association). (2019). *2019 essential facts about the computer and video game industry*. https://www.theesa.com/wp-content/uploads/2019/05/2019-Essential-Facts-About-the-Computer-and-Video-Game-Industry.pdf

Geise, S., Rössler, P., & Kruschinski, S. (2016). Automatisierte Analyse medialer Bildinhalte. Potenziale, Grenzen, methodischtechnischer Status Quo und zukünftige Herausforderungen – eine Bestandsaufnahme. *Medien & Kommunikationswissenschaft*, *64*(2), 244–269.

Grimmer, J., & Stewart, B. M. (2013). Text as data: The promise and pitfalls of automatic content analysis methods for political texts. *Political Analysis*, *21*(3), 267–297.

Haninger, K., & Thompson, K. M. (2004). Content and ratings of teen-rated video games. *JAMA: The Journal of the American Medical Association*, *160*(4), 402–410.

Hartmann, T., Krakowiak, K. M., & Tsay-Vogel, M. (2014). How violent video games communicate violence: A literature review and content analysis of moral disengagement factors. *Communication Monographs*, *81*(3), 310–332.

Heintz-Knowles, K., Henderson, J., Glaubke, C., Miller, P., Parker, M., & Espejo, E. (2001). *Fair play? Violence, gender and race in video games.* Children Now. http://www.eric.ed.gov/ERICWebPortal/recordDetail?accno=ED463092

Ivory, J. (2006). Still a man's game: Gender representation in online reviews of video games. *Mass Communication & Society*, *9*(1), 103–114.

Jansz, J., & Martis, R. G. (2007). The Lara phenomenon: Powerful female characters in video games. *Sex Roles*, *56*(3–4), 141–148.

Klimmt, C., & Possler, D. (2020). Video games. In *Media effects: Advances in theory and research* (4th ed., pp. 342–356). Routledge.

Klopfer, E., Osterweil, S., & Salen, K. (2009). Moving learning games forward: Obstacles, opportunities and openness. The education arcade. *Massachusetts Institute of Technology*.

Koban, K., Breuer, J., Rieger, D., Mohseni, M. R., Noack, S., Bente, G., & Ohler, P. (2019). Playing for the thrill and skill. Quiz games as means for mood and competence repair. *Media Psychology*, *22*(5), 743–768.

Lachlan, K. A., Smith, S. L., & Tamborini, R. (2005). Models for aggressive behavior: The attributes of violent characters in popular video games. *Communication Studies*, *56*(4), 313–329.

Lu, A. S., & Kharrazi, H. (2018). A state-of-the-art systematic content analysis of games for health. *Games for Health Journal*, *7*(1), 1–15.

Lynch, T., Tompkins, J. E., van Driel, I. I., & Fritz, N. (2016). Sexy, strong, and secondary: A content analysis of female characters in video games across 31 years. *Journal of Communication*, *66*(4), 564–584.

Miller, M. K., & Summers, A. (2007). Gender differences in video game characters' roles, appearances, and attire as portrayed in video game magazines. *Sex Roles*, *57*(9–10), 733–742.

Possler, D., Bruns, S., & Niemann-Lenz, J. (2019). Data is the new oil—But how do we drill it? Pathways to access and acquire large data sets in communication science. *International Journal of Communication; Vol 13 (2019)*. https://ijoc.org/index.php/ijoc/article/view/10737

Provenzo, E. F. (1992). The video generation. *American School Board Journal*, *179*(3), 29–32.

Ratan, R., & Ritterfeld, U. (2009). Classifying serious games. In U. Ritterfeld, M. Cody, & P. Vorderer (Eds.), *Serious games. Mechanisms and effects* (pp. 10–24). Routledge.

Scharrer, E. (2004). Virtual violence: Gender and aggression in video game advertisements. *Mass Communication and Society*, *7*(4), 393–412.

Schmierbach, M. (2009). Content analysis of video games: Challenges and potential solutions. *Communication Methods and Measures*, *3*(3), 147–172.

Shibuya, A., & Sakamoto, A. (2005). The quantity and context of video game violence in Japan: Toward creating an ethical standard. In K. Arai & F. Kato (Eds.), *Gaming, simulation, and society: Research scope and perspective* (pp. 111–120). Springer.

Sjöblom, M., & Hamari, J. (2017). Why do people watch others play video games? An empirical study on the motivations of Twitch users. *Computers in Human Behavior*, *75*, 985–996.

Smith, S. L. (2006). Perps, pimps, and provocative clothing: Examining negative content patterns in video games. In P. Vorderer & J. Bryant (Eds.), *Playing video games. Motives, effects, and consequences* (pp. 57–75). Lawrence Erlbaum.

Smith, S. L., Lachlan, K. A., & Tamborini, R. (2003). Popular video games: Quantifying the presentation of violence and its context. *Journal of Broadcasting & Electronic Media*, *47*(1), 58–76.

van Atteveldt, W., & Peng, T.-Q. (2018). When communication meets computation: Opportunities, challenges, and pitfalls in computational communication science. *Communication Methods and Measures*, *12*(2–3), 81–92.

Wang, X., & Goh, D. H.-L. (2020). Components of game experience: An automatic text analysis of online reviews. *Entertainment Computing*.

Weber, R., Behr, K.-M., & DeMartino, C. (2014). Measuring interactivity in video games. *Communication Methods and Measures*, *8*(2), 79–115.

Wohn, D. Y., & Freeman, G. (2020). Live streaming, playing, and money spending behaviors in eSports. *Games and Culture*, *15*(1), 73–88.

Wulf, T., Rieger, D., Kümpel, A. S., & Reinecke, L. (2019). Harder, better, faster, stronger? The relationship between cognitive task demands in video games and recovery experiences. *Media and Communication*, *7*(4), 166.

Wulf, T., Schneider, F. M., & Beckert, S. (2018). Watching players: An exploration of media enjoyment on *Twitch*. *Games and Culture*.

Zhu, M., & Fang, X. (2015). A lexical approach to study computer games and game play experience via online reviews. *International Journal of Human–Computer Interaction*, *31*(6), 413–426.

Tim Wulf (Dr. phil., University of Cologne) is a Postdoctoral Researcher at the Department of Media and Communication at LMU Munich in Germany. His research interests include experiences and effects of media-induced nostalgia, the psychology of playing and watching video games, and persuasion through narrative media content. For more information, see www.tim-wulf.de.

Daniel Possler (Dr. phil., Hanover University of Music, Drama and Media) is a Postdoctoral Researcher at the Department of Journalism and Communication Research at the Hanover University of Music, Drama and Media in Germany. His research focuses on media use and effects, media entertainment particularly resulting from digital, interactive media such as video games, and the integration of innovative computational methods in communication science.

Johannes Breuer (Dr. phil., University of Cologne) works as a senior researcher in the team Survey Data Augmentation, Department Survey Data Cutarion at GESIS—Leibniz Institute for the Social Sciences in Cologne (Germany) and (co-)leads the team Research Data & Methods at the Center for Advanced Internet Studies (CAIS) in Bochum (Germany). His research interests include the use and effects of digital media, computational methods, data management, and open science.

Content Analysis in Research on (Professional) Communicators & Strategic Communication [Die Inhaltsanalyse in der Forschung zur strategischen Kommunikation]



Content Analysis in the Research Field of Political Communication: The Self-Presentation of Political Actors

Sina Blassnig

1 Introduction

Political communication is a very wide-ranging, complex, and fluid subfield (see, e.g., Blumler 2017). In a broad sense, political communication can be understood as the central mechanism in the articulation of political interests, their aggregation and implementation, and the legitimation of political decisions (Donges and Jarren 2017)[1]. From this perspective, politics and political communication are inextricably linked (Blumler 2017; Donges and Jarren 2017; Schulz 2011). Within this broad field, this chapter focuses on the *self-presentational side* of politics, more specifically the *self-presentation of political actors*. In the process of political communication, the *self-presentation* of politics can be differentiated on the one hand from the *production* of politics and on the other hand from its *media representation* (Esser 2013; Meyer and Hinchman 2002). The logic of self-presentation prevails in the phases of interest articulation, preference mobilization, problem definition, the communication of policies, and the justification of outcomes (Esser 2013). In contrast to mediated political messages that are selected, filtered, and shaped by journalistic gatekeepers (i.e. political

[1] For other definitions see, for example, Graber and Smith (2005); Reinemann (2014); Schulz (2008).

S. Blassnig (✉)
Universität Zürich, IKMZ, Zurich, Switzerland
E-Mail: s.blassnig@ikmz.uzh.ch

F. Oehmer-Pedrazzi et al. (Hrsg.), *Standardisierte Inhaltsanalyse in der Kommunikationswissenschaft – Standardized Content Analysis in Communication Research*, https://doi.org/10.1007/978-3-658-36179-2_26

news coverage), the self-presentation of political actors relates mostly to messages that proceed directly from the source—political actors—to the intended recipients (e.g., in the form of political advertising, party broadcasts, social media messages, and other online campaigns) (see Blumler 2017, for this distinction). However, in *hybrid media systems* (Chadwick 2017) political actors' self-presentation not only aims at circumventing traditional gatekeepers but also at gaining attention in the mass media, for example by way of political PR (Strömbäck and Kiousis 2011) or strategic news management (Strömbäck and Esser 2017). Thus, political communication by political actors has overlaps with the research fields of Politics/Policy Coverage and Election Coverage. Because trends in political communication often crystallize in election campaigns, the greatest overlap exists with the field of Election Campaigning Communication. Due to these overlaps and the breadth of the field, in the following this chapter will focus on a few selected aspects that have gained attention in the last few years such as issue ownership, personalization, populist communication, and self-presentational styles.

Content analysis is perhaps the most widely used method in the field of political communication (Graber and Smith 2005; Neuendorf and Kumar 2017). Historically, the analysis of political actors' communication can be traced back to Aristotle, who distinguished between three fundamental modes of persuasion in political actors' speeches: *Ethos, Pathos,* and *Logos* (see also Sheafer et al. 2014). Also in more recent times, political speeches have played an important role for the analysis of political actors' self-presentation, especially from a more qualitative or discourse analytical approach (e.g., Hawkins 2009; van Dijk 1993, 2015; Wodak 2013). In the field of political communication, studies of politicians' self-presentation have often investigated television news (e.g., Bucy and Grabe 2007), debates (e.g., Boydstun et al. 2013), talk-shows (e.g., Baum 2005; Schütz 1992, 1995), party or election manifestos (e.g., Merz et al. 2016), press releases (e.g., Dalmus et al. 2017), or political advertising (e.g., Holtz-Bacha et al. 1994). With an increasingly interventionist approach of journalistic news, politicians have looked for other self-presentational communication channels that offer them the opportunity to appeal to their voters directly with low journalistic interference (Blumler and Kavanagh 1999). In recent years, studies of political actors' self-presentation have increasingly focused on digital platforms such as websites (Stanyer 2008), or social media (e.g., Bene 2017; Bracciale and Martella 2017; Ernst et al. 2017; Golbeck et al. 2010; Keller and Kleinen-von Königslöw 2018; Kruikemeier 2014; Magin et al. 2017). Moreover, in hybrid media systems (Chadwick 2017), politicians increasingly use a mix of various media outlets for self-presentational purposes.

2 Common research designs and combinations of methods

As in other fields, a broad variety of research strategies and designs are used in content analyses of political actors' self-presentation. Although *quantitative content analysis* remains the dominant method in political communication (Neuendorf and Kumar

2017), *qualitative content analyses* (e.g., Engesser et al. 2017; Enli and Skogerbø 2013; Liebhart and Bernhardt 2017) as well as *linguistic approaches* (e.g., Chilton 2006) and *critical discourse analyses* (e.g., van Dijk 1993; Wodak 2013) are also common in research on the self-presentation of politicians—especially for studies that focus on rhetoric.

Empirical studies often investigate one single communication channel or platform such as political speeches, press releases, party manifestos, talk shows, advertisements, websites, Twitter, Facebook, or Instagram. Yet, scholars increasingly compare political actors' self-presentation across different media or platforms (Bode and Vraga 2017). In the tradition of agenda-building research (Lang and Lang 1981), analyses of self-presentational channels are often combined with content analyses of political news coverage to investigate which messages or issues of political actors are picked up by the mass media (e.g., Ernst et al. 2019; Seethaler and Melischek 2019).

Researchers in the field of political communication often apply content analyses in combination with other methods. Studies combine *manual* and *automated content analysis* (e.g., Eberl et al. 2020; Lewis et al. 2013), *semi-automated content analysis* (e.g., Ernst et al. 2017), and/or *social network analysis* (e.g., Stieglitz and Dang-Xuan 2013). Content analysis is also frequently combined with *expert surveys or interviews* with political actors to investigate the motives or strategies behind their self-presentational communication (e.g., Enli and Skogerbø 2013; Karlsen and Enjolras 2016; Magin et al. 2017). Furthermore, content analyses have been combined with *panel- or cross-sectional survey data* to analyze communication effects, for example on public opinion formation or public attitudes (e.g., de Vreese et al. 2017). Lately, scholars have applied content analysis to *digital trace data,* for example, to investigate the effects of specific communication content or style elements of social media posts on user reactions in the form of popularity cues (e.g., Bene 2017; Eberl et al. 2020; Heiss et al. 2019; Jost et al. 2020; Keller and Kleinen-von Königslöw 2018; Staender et al. 2019).

3 Main constructs employed in content analyses of political communication by political actors

Content analyses on the self-presentation of political actors have not only investigated diverse communication channels but also diverse types of actors and constructs. Whereas many content analyses investigate the communication of parties or other organizational actors, studies on the self-presentation of political actors often focus on individual politicians or specifically on political leaders (e.g., Bracciale and Martella 2017; Davis and Taras 2020). In substantive terms, the field is very broad. Despite this diversity, several commonly analyzed constructs can be distilled from the field. However, it is important to emphasize that the following constructs are a small selection of aspects that are commonly analyzed with regard to the content (*what?*), the style (*how?*), and the rhetoric of political actors' self-presentation.

- *Policies or **issues** as message:* Focusing on the content (*what?*) that political actors communicate, one major goal of political actors' communication is to place their issues on the political agenda (Strömbäck and Esser 2017). Thus, studies often investigate what issues parties or individual politicians focus on in their self-presentation. Studies have found that political actors often focus on issues owned by their party**,** for example in parties' press releases (Dalmus et al. 2017) or politicians' social media use (Peeters et al. 2019). Furthermore, owned issues can induce social media reactions (Staender et al. 2019) and press coverage (Dalmus et al. 2017) (see, e.g., Walgrave et al. 2015 for a general conceptualization of issue ownership). In contrast, political actors can ride the wave by emphasizing issues that currently seem to be important to citizens, for example according to opinion polls or media coverage (Dalmus et al. 2017). Whereas issue ownership is usually linked to parties, an additional issue specialization can be identified for individual politicians, through which they can differentiate themselves from other politicians within the same party (Peeters et al. 2019). Studies of agenda building have compared the occurrence of issues in channels where political actors have high control to journalistic outlets where political actors have less control (Harder et al. 2017; Kiousis et al. 2006; Seethaler and Melischek 2019).
- *Person as message:* Instead of issues, political actors may focus on their *person or character as message***,** for example by way of image or event management (Strömbäck and Esser 2017). It has been argued that there is an increasing personalization, meaning that the political weight of individual actors has increased, while the centrality of political groups or issues have declined over time (e.g., Adam and Maier 2010; Sheafer et al. 2014). This has mostly been studied with regard to politicians' appearance in the news media (e.g., Holtz-Bacha et al. 2014; van Aelst et al. 2012; van Santen and van Zoonen 2010). However, these concepts can be applied similarly to the analysis of politicians' self-presentation. Several content analyses have shown that political actors' communication on social media often focuses on individual politicians' competencies and professional activities (individualization) or their private persona (privatization) (e.g., Golbeck et al. 2010; Kruikemeier 2014; Metz et al. 2019).
- *Function of messages:* Studies have investigated different functions of political actors' messages on various platforms. Especially with regard to social media, studies have differentiated for example between messages that focus on information, mobilization, or interaction (Koc-Michalska et al. 2016; Lilleker et al. 2011; Magin et al. 2017).
- *Populist messages:* Populism has been one of the major trending subjects in the field of political communication in recent years (see, e.g., de Vreese et al. 2018; Rooduijn 2019). Content analyses have analyzed the extent to which political actors communicate populist ideas or populist key messages (i.e., anti-elitism, people-centrism, sovereignty, and sometimes also the exclusion of specific social groups) across various self-presentational communication channels such as talk

shows or social media (Blassnig et al. 2018; Bos and Brants 2014; Cranmer 2011; Ernst et al. 2017; Ernst et al. 2019a, b; Zulianello et al. 2018). These studies have identified several factors that drive populism in political actors' self-presentation such as party characteristics (e.g. extreme ideology, opposition parties, challenger parties, backbenchers) and characteristics of the communication channel (e.g., publicity, high audience orientation, mass or network media logic). Studies have also found that populist messages by political actors may contribute to high numbers of user reactions on social media (Blassnig et al. 2020; Bobba 2018; Jost et al. 2020). Populist key messages can be distinguished from populist styles (Ernst et al. 2019a; see also below). However, some authors (e.g., Jagers and Walgrave 2007) speak of populism as a "political communication style" but use analytical constructs that refer to similar content-related elements. Other authors mix populist ideas and style elements (e.g., Moffitt 2016).

- *Self-presentational styles:* A large body of research analyzes *how* political actors communicate by differentiating various *communication styles.* For example, Schütz (1992, 1995) has differentiated between assertive, offensive, protective, and defensive self-presentational styles and compared politicians' self-presentation on talk shows to that of entertainers and experts. Current commonly investigated communication styles include emotionality, negativity, dramatization, intimization, simplification, or humour (Bene 2017; Heiss et al. 2019; Keller and Kleinen-von Königslöw 2018; Staender et al. 2019). These constructs are reminiscent of journalistic reporting styles but are applied similarly in content analyses of political actors' self-presentation on various channels, specifically on social media. In this sense, these styles are sometimes seen as indicators for political actors' adaptation to *news values*, *mass media logic,* or *network media logic* (Bene 2017; Staender et al. 2019; Walter and Vliegenthart 2010). Other studies have investigated similar categories as **populist communication styles** (Bos and Brants 2014; Bracciale and Martella 2017; Ernst et al. 2019a; Ernst et al. 2019b; Wettstein et al. 2019). These constructs measuring communication style can be distinguished from contructs analyzing the content or substance (*what?*) of messages (see, e.g., Ernst et al. 2019a for this distinction with regard to populist communication). However, in content analyses, communication styles are still mostly assessed in relation to the content (i.e. the written or spoken word). Thus, the boundary between substance and style is not always clear in empirical studies. For example, Keller and Kleinen-von Königslöw's (2018) distinction of pseudo-discursive, mobilizing, emotional, and entertaining styles combines both content and style-related elements. Metz et al. (2019) also integrate content-related (e.g., references to professional activities) and style-related (e.g. emotional expression and appeals) aspects in their operationalization of self-personalization (see also above).
- *Rhetoric:* Several studies investigate the rhetoric or rhetorical skills of political actors. These analyses are traditionally rooted in linguistic or discourse analysis and, thus,

typically examined using qualitative content analysis (van Dijk 1993; Wodak 2013). However, rhetorical constructs such as ethos (source credibility), pathos (emotional appeals), and logos (logical appeals) (Holtz-Bacha et al. 1994) or rhetorical fallacies (Blassnig et al. 2019) have also been investigated in quantitative content analyses of politicians' self-presentation. Yet, rhetorical theory has rather scarcely been incorporated in (quantitative) analyses of political actors' self-presentation in the field of political communication, despite of a growing understanding of the importance of rhetorical strategies (Sheafer et al. 2014).

4 Research desiderata

A major challenge for future research is to broaden its scope by following more comparative designs. Although comparative approaches across different countries have increased (e.g., Blassnig et al. 2018; Ernst et al. 2019b; Esser and Pfetsch 2017; Koc-Michalska et al. 2016; Lilleker et al. 2011; Zulianello et al. 2018), they are mostly small-N comparative analyses and largely focus on Western countries. Comparisons across time are still relatively rare, although they would be crucial to determine changes in the self-presentation of political actors. Moreover, future research should aim at multi-channel comparisons and incorporate both newer digital and more established platforms to account for hybrid media systems.

A majority of the studies focus on election campaigns. This is understandable as elections can serve as prototypical events in which current trends in political communication crystallize (Esser and Strömbäck 2013, p. 308). However, future research should also investigate political actors' self-presentation in non-election periods and compare election and non-election contexts. Furthermore, previous research has focused mainly on the national political level, whereas the supranational (e.g., Holtz-Bacha 2020) and subnational levels (e.g., Tenscher 2013) have been severely neglected.

One area that has been neglected in this chapter are visual aspects, which generally have been neglected in political communication for a long time (Schill 2012). With the rise of social media, especially of visual communication platforms such as Instagram, images and visual categories have gained interest in content analyses (e.g., Filimonov et al. 2016; Liebhart and Bernhardt 2017; Muñoz and Towner 2017; Towner and Muñoz 2018). Yet, existing studies have often remained exploratory (e.g., Filimonov et al. 2016; Liebhart and Bernhardt 2017).

Another major challenge are content analyses of large-scale textual data sets (e.g., Muddiman et al. 2019), which have gained traction especially with regard to digital communication channels. These data increasingly require more computational approaches to content analysis. Generally, research on political actors' online self-presentation remains methodologically challenging, due to a lack of access to data. For example, the self-representation of political actors in personalized ads (e.g. on Facebook) has hardly been researched so far (e.g., Anstead et al. 2018).

Finally, as in other fields, a more thorough sharing and re-application of research instruments would be helpful. Many of the studies measure similar analytical constructs with various operationalizations and instruments, making it difficult to compare their results. Thus, going forward a more detailed publication of codebooks and data (e.g. in online appendices) would allow for a more transparent and sustainable cumulative development of the field and for a more thorough assessment of how the self-presentation of political actors has evolved across different contexts.

2. Relevant Variables in DOCA—Database of Variables for Content Analysis

Political issues: https://doi.org/10.34778/4a
Populist communication – content and style elements: https://doi.org/10.34778/4b

References

Adam, S., & Maier, M. (2010). Personalization of politics. A critical review and agenda for research. *Annals of the International Communication Association*, *34*(1), 213–257.

Anstead, N., Magalhães, J. C., Stupart, R., & Tambini, D. (2018). Political Advertising on Facebook: The Case of the 2017 United Kingdom General Election. Paper presented at the European Consortium of Political Research Annual General Meeting, Hamburg, 22nd – 25th August 2018.

Baum, M. A. (2005). Talking the vote: Why presidential candidates hit the talk show circuit. *American Journal of Political Science*, *49*(2), 213–234.

Bene, M. (2017). Sharing is caring! Investigating viral posts on politicians' Facebook pages during the 2014 general election campaign in Hungary. *Journal of Information Technology & Politics*, *14*(4), 387–402.

Blassnig, S., Büchel, F., Ernst, N., & Engesser, S. (2019). Populism and informal fallacies: An analysis of right-wing populist rhetoric in election campaigns. *Argumentation*, *33*(1), 107–136.

Blassnig, S., Ernst, N., Büchel, F., & Engesser, S. (2018). Populist communication in talk shows and social media. A comparative content analysis in four countries. *SCM Studies in Communication and Media*, *7*(3), 338–363.

Blassnig, S., Ernst, N., Engesser, S., & Esser, F. (2020). Populism and social media popularity: How populist communication benefits political leaders on Facebook and Twitter. In R. Davis & D. Taras (Eds.), *Power shift? Political leadership and social media* (97–111). Routledge.

Blumler, J. G. (2017). Political communication. In G. Mazzoleni (Ed.), *The international encyclopedia of political communication* (Vol. 58, pp. 1–17). Wiley-Blackwell.

Blumler, J. G., & Kavanagh, D. (1999). The third age of political communication: Influences and features. *Political Communication*, *16*(3), 209–230.

Bobba, G. (2018). Social media populism: Features and 'likeability' of Lega Nord communication on Facebook. *European Political Science*, 1–13.

Bode, L., & Vraga, E. K. (2017). Studying politics across media. *Political Communication*, *35*(1), 1–7.

Bos, L., & Brants, K. (2014). Populist rhetoric in politics and media: A longitudinal study of the Netherlands. *European Journal of Communication*, *29*(6), 703–719.

Boydstun, A. E., Glazier, R. A., & Pietryka, M. T. (2013). Playing to the crowd: Agenda control in presidential debates. *Political Communication*, *30*(2), 254–277.

Bracciale, R., & Martella, A. (2017). Define the populist political communication style: the case of Italian political leaders on Twitter. *Information, Communication & Society*, *20*(9), 1310–1329.

Bucy, E. P., & Grabe, M. E. (2007). Taking television seriously: A sound and image bite analysis of presidential campaign coverage, 1992-2004. *Journal of Communication*, *57*(4), 652–675.

Chadwick, A. (2017). *The hybrid media system: Politics and power* (Second edition). Oxford University Press.

Chilton, P. A. (2006). *Analysing political discourse: Theory and practice* (Repr). Routledge.

Cranmer, M. (2011). Populist communication and publicity: An empirical study of contextual differences in Switzerland. *Swiss Political Science Review*, *17*(3), 286–307.

Dalmus, C., Hänggli, R., & Bernhard, L. (2017). The charm of salient issues? Parties' strategic behavior in press releases. In P. van Aelst & S. Walgrave (Eds.), *How political actors use the media: A functional analysis of the media's role in politics* (pp. 187–205). Springer International Publishing.

Davis, R., & Taras, D. (Eds.). (2020). *Power shift? Political leadership and social media*. Routledge.

de Vreese, C. H., Boukes, M., Schuck, A., Vliegenthart, R., Bos, L., & Lelkes, Y. (2017). Linking survey and media content data: Opportunities, considerations, and pitfalls. *Communication Methods and Measures*, *11*(4), 221–244.

de Vreese, C. H., Esser, F., Aalberg, T., Reinemann, C., & Stanyer, J. (2018). Populism as an expression of political communication content and style: A new perspective. *The International Journal of Press/Politics*, *23*(4), 423–438.

Donges, P., & Jarren, O. (Eds.). (2017). *Studienbücher zur Kommunikations- und Medienwissenschaft*. *Politische Kommunikation in der Mediengesellschaft: Eine Einführung* (4. Auflage). Springer VS.

Eberl, J.-M., Tolochko, P., Jost, P., Heidenreich, T., & Boomgaarden, H. G. (2020). What's in a post? How sentiment and issue salience affect users' emotional reactions on Facebook. *Journal of Information Technology & Politics*, *17*(1), 48–65.

Engesser, S., Ernst, N., Esser, F., & Büchel, F. (2017). Populism and social media: How politicians spread a fragmented ideology. *Information, Communication & Society*, *20*(8), 1109–1126.

Enli, G. S., & Skogerbø, E. (2013). Personalized campaigns in party-centred politics. *Information, Communication & Society*, *16*(5), 757–774.

Ernst, N., Blassnig, S., Engesser, S., Büchel, F., & Esser, F. (2019a). Populists prefer social media over talk shows: An analysis of populist messages and stylistic elements across six countries. *Social Media + Society*, *5*(1), 1–14.

Ernst, N., Engesser, S., Büchel, F., Blassnig, S., & Esser, F. (2017). Extreme parties and populism: An analysis of Facebook and Twitter across six countries. *Information, Communication & Society, 20*(9), 1347–1364.

Ernst, N., Esser, F., Blassnig, S., & Engesser, S. (2019b). Favorable opportunity structures for populist communication: Comparing different types of politicians and issues in social media, television and the press. *The International Journal of Press/Politics*, *24*(2), 165–188.

Esser, F. (2013). Mediatization as a challenge: Media logic versus political logic. In H. Kriesi, S. Lavenex, F. Esser, J. Matthes, M. Bühlmann, & D. Bochsler (Eds.), *Democracy in the age of globalization and mediatization* (pp. 155–176). Palgrave Macmillan UK.

Esser, F., & Pfetsch, B. (2017). Comparing political communication. In D. Caramani (Ed.), *Comparative politics* (4th ed., pp. 327–345). Oxford University Press.

Esser, F., & Strömbäck, J. (2013). Comparing news on national elections. In F. Esser & T. Hanitzsch (Eds.), *Handbook of comparative communication research* (pp. 308–326). Routledge.

Filimonov, K., Russmann, U., & Svensson, J. (2016). Picturing the party: Instagram and party campaigning in the 2014 Swedish elections. *Social Media + Society*, *2*(3), 1–11.

Golbeck, J., Grimes, J. M., & Rogers, A. (2010). Twitter use by the U.S. Congress. *Journal of the American Society for Information Science and Technology, 61*(8), 1612–1621.

Graber, D. A., & Smith, J. M. (2005). Political communication faces the 21st century. *Journal of Communication*, *55*(3), 479–507.

Harder, R. A., Sevenans, J., & van Aelst, P. (2017). Intermedia agenda setting in the social media age: How traditional players dominate the news agenda in election times. *The International Journal of Press/Politics*, *22*(3), 275–293.

Hawkins, K. A. (2009). Is Chavez populist? Measuring populist discourse in comparative perspective. *Comparative Political Studies*, *42*(8), 1040–1067.

Heiss, R., Schmuck, D., & Matthes, J. (2019). What drives interaction in political actors' Facebook posts? Profile and content predictors of user engagement and political actors' reactions. *Information, Communication & Society*, *22*(10), 1497–1513.

Holtz-Bacha, C. (Ed.). (2020). *Europawahlkampf 2019: Zur Rolle der Medien*. Springer VS.

Holtz-Bacha, C., Langer, A. I., & Merkle, S. (2014). The personalization of politics in comparative perspective: Campaign coverage in Germany and the United Kingdom. *European Journal of Communication*, *29*(2), 153–170.

Holtz-Bacha, C., Kaid, L. L., & Johnston, A. (1994). Political television advertising in western democracies: A comparison of campaign broadcasts in the United States, Germany, and France. *Political Communication*, *11*(1), 67–80.

Jagers, J., & Walgrave, S. (2007). Populism as political communication style: An empirical study of political parties' discourse in Belgium. *European Journal of Political Research*, *46*(3), 319–345.

Jost, P., Maurer, M., & Hassler, J. (2020). Populism fuels love and anger: The impact of message features on users' reactions on Facebook. *International Journal of Communication*, *14*, 2081–2102.

Karlsen, R., & Enjolras, B. (2016). Styles of social media campaigning and influence in a hybrid political communication system: Linking candidate survey data with Twitter data. *The International Journal of Press/Politics*, *21*(3), 338–357.

Keller, T. R., & Kleinen-von Königslöw, K. (2018). Pseudo-discursive, mobilizing, emotional, and entertaining: identifying four successful communication styles of political actors on social media during the 2015 Swiss national elections. *Journal of Information Technology & Politics*, *15*(4), 358–377.

Kiousis, S., Mitrook, M., Wu, X., & Seltzer, T. (2006). First- and second-level agenda-building and agenda-setting effects: Exploring the linkages among candidate news releases, media coverage, and public opinion during the 2002 Florida gubernatorial election. *Journal of Public Relations Research*, *18*(3), 265–285.

Koc-Michalska, K., Lilleker, D. G., Smith, A., & Weissmann, D. (2016). The normalization of online campaigning in the web.2.0 era. *European Journal of Communication*, *31*(3), 331–350.

Kruikemeier, S. (2014). How political candidates use Twitter and the impact on votes. *Computers in Human Behavior*, *34*, 131–139.

Lang, G. E., & Lang, K. (1981). Watergate: An exploration of the agenda-building process. In G. C. Wilhoit & H. De Bock (Eds.), *Mass Communication Review Yearbook* (pp. 447–468). Sage.

Lewis, S. C., Zamith, R., & Hermida, A. (2013). Content analysis in an era of big data: A hybrid approach to computational and manual methods. *Journal of Broadcasting & Electronic Media*, *57*(1), 34–52.

Liebhart, K., & Bernhardt, P. (2017). Political storytelling on Instagram: Key aspects of Alexander van der Bellen's successful 2016 presidential election campaign. *Media and Communication*, *5*(4), 15.

Lilleker, D. G., Koc-Michalska, K., Schweitzer, E. J., Jacunski, M., Jackson, N., & Vedel, T. (2011). Informing, engaging, mobilizing or interacting: Searching for a European model of web campaigning. *European Journal of Communication*, *26*(3), 195–213.

Magin, M., Podschuweit, N., Haßler, J., & Russmann, U. (2017). Campaigning in the fourth age of political communication. A multi-method study on the use of Facebook by German and Austrian parties in the 2013 national election campaigns. *Information, Communication & Society*, *20*(11), 1698–1719.

Merz, N., Regel, S., & Lewandowski, J. (2016). The Manifesto Corpus: A new resource for research on political parties and quantitative text analysis. *Research & Politics*, *3*(2).

Metz, M., Kruikemeier, S., & Lecheler, S. (2019). Personalization of politics on Facebook: examining the content and effects of professional, emotional and private self-personalization. *Information, Communication & Society*, *33*(3), 1–18.

Meyer, T., & Hinchman, L. (2002). *Media democracy: How the media colonize politics*. Polity Press.

Moffitt, B. (2016). *The global rise of populism: Performance, political style, and representation*. Stanford University Press.

Muddiman, A., McGregor, S. C., & Stroud, N. J. (2019). (Re)Claiming our expertise: Parsing large text corpora with manually validated and organic dictionaries. *Political Communication*, *36*(2), 214–226.

Muñoz, C. L., & Towner, T. L. (2017). The image is the message: Instagram marketing and the 2016 presidential primary season. *Journal of Political Marketing*, *16*(3-4), 290–318.

Neuendorf, K., & Kumar, A. (2017). Content analysis. In G. Mazzoleni (Ed.), *<The> international encyclopedia of political communication.* Wiley-Blackwell.

Peeters, J., van Aelst, P., & Praet, S. (2019). Party ownership or individual specialization? A comparison of politicians' individual issue attention across three different agendas. *Party Politics*, 1–12.

Reinemann, C. (2014). *Political communication*. De Gruyter.

Rooduijn, M. (2019). State of the field: How to study populism and adjacent topics? A plea for both more and less focus. *European Journal of Political Research*, *58*(1), 362–372.

Schill, D. (2012). The visual image and the political image: A review of visual communication research in the field of political communication. *Review of Communication*, *12*(2), 118–142.

Schulz, W. (2008). Political communication. In W. Donsbach (Ed.), *The international encyclopedia of communication* (Vol. 58, pp. 1–13). John Wiley & Sons, Ltd.

Schulz, W. (2011). *Politische Kommunikation*. VS Verlag für Sozialwissenschaften.

Schütz, A. (1992). *Selbstdarstellung von Politikern: Analyse von Wahlkampfauftritten*. Dt. Studien-Verl.

Schütz, A. (1995). Entertainers, experts, or public servants? Politicians' self-presentation on television talk shows. *Political Communication*, *12*(2), 211–221.

Seethaler, J., & Melischek, G. (2019). Twitter as a tool for agenda building in election campaigns? The case of Austria. *Journalism*, *20*(8), 1087–1107.

Sheafer, T., Shenhav, S. R., & Balmas, M. (2014). 11. Political actors as communicators. In C. Reinemann (Ed.), *Political communication.* De Gruyter.

Staender, A., Ernst, N., & Steppat, D. (2019). Was steigert die Facebook-Resonanz? Eine Analyse der Likes, Shares und Comments im Schweizer Wahlkampf 2015. *SCM Studies in Communication and Media*, *8*(2), 236–271.

Stanyer, J. (2008). Elected representatives, online self-presentation and the personal vote: Party, personality and webstyles in the United States and United Kingdom. *Information, Communication & Society*, *11*(3), 414–432.

Stieglitz, S., & Dang-Xuan, L. (2013). Social media and political communication: a social media analytics framework. *Social Network Analysis and Mining*, *3*(4), 1277–1291.

Strömbäck, J., & Esser, F. (2017). Political public relations and mediatization: The strategies of news management. In P. van Aelst & S. Walgrave (Eds.), *How political actors use the media: A functional analysis of the media's role in politics* (pp. 63–83). Springer International Publishing.

Strömbäck, J., & Kiousis, S. (2011). *Political public relations: Principles and applications*. *Routledge communication series*. Routledge.

Tenscher, J. (2013). Politische Kommunikation im Kleinen – eine Einleitung. *SCM Studies in Communication and Media*, *2*(3), 265–273.

Towner, T. L., & Muñoz, C. L. (2018). Picture perfect? The role of Instagram in issue agenda setting during the 2016 presidential primary campaign. *Social Science Computer Review*, *36*(4), 484–499.

van Aelst, P., Sheafer, T., & Stanyer, J. (2012). The personalization of mediated political communication: A review of concepts, operationalizations and key findings. *Journalism: Theory, Practice & Criticism*, *13*(2), 203–220.

van Dijk, T. A. (1993). Principles of critical discourse analysis. *Discourse & Society*, *4*(2), 249–283.

van Dijk, T. A. (2015). Critical discourse analysis. In D. Tannen, H. E. Hamilton, & D. Schiffrin (Eds.), *Blackwell handbooks in linguistics. The handbook of discourse analysis* (Vol. 23, pp. 466–485). Wiley Blackwell.

van Santen, R., & Van Zoonen, L. (2010). The personal in political television biographies. *Biography*, *33*(1), 46–67.

Walgrave, S., Tresch, A., & Lefevere, J. (2015). The conceptualisation and measurement of issue ownership. *West European Politics*, *38*(4), 778–796.

Walter, A. S., & Vliegenthart, R. (2010). Negative campaigning across different communication channels: Different ball games? *The International Journal of Press/Politics*, *15*(4), 441–461.

Wettstein, M., Esser, F., Büchel, F., Schemer, C., Wirz, D. S., Schulz, A., Ernst, N., Engesser, S., Müller, P., & Wirth, W. (2019). What drives populist styles? Analyzing immigration and labor market news in 11 countries. *Journalism & Mass Communication Quarterly*, *96*(2), 516–536.

Wodak, R. (2013). *Applications, interdisciplinary perspectives and new trends*. Sage.

Zulianello, M., Albertini, A., & Ceccobelli, D. (2018). A populist Zeitgeist? The communication strategies of Western and Latin American political leaders on Facebook. *The International Journal of Press/Politics*, *23*(4), 439–457.

Dr. Sina Blassnig is a senior research and teaching associate at the Department of Communication and Media Research, University of Zurich. Her research focuses on populism, political communication, digital journalism, and comparative media research.


cc
BY



Content Analysis in the Research Field of Election Campaign Communication

Desiree Steppat und Laia Castro

1 Introduction

The field of election campaign communication is concerned with any form of communication by political elites, parties or professional interest groups with the aim of informing, persuading, interacting and mobilizing citizens and, ultimately, influencing the result of a particular election (Scammell 2016). As Esser and Strömbäck (2013) define them, "campaigns are prototypical events of mobilization in which national political communication traditions crystallize, and latent properties come to the fore as if held under a microscope" (Esser and Strömbäck 2013, p. 308). As the authors further argue, electoral campaigns have a clear start and ending point and occur at regular intervals, which make them easily traceable and allow researchers to plan their data analyses well in advance. These qualities make them political events particularly worth-researching, and also equivalent units of analysis to investigate political communication trends across different countries. Against this background, it is no surprise that electoral campaigns are one of the most populated research domains in the field of political communication to date (de Vreese 2017; Graber 2005).

With this chapter we aim to identify main trends and gaps in this popular area of study by relying on a thorough literature review of election campaign communication

D. Steppat (✉)
Landesanstalt für Medien NRW, Düsseldorf, Germany
E-Mail: desiree.steppat@medienanstalt-nrw.de

L. Castro
Departament de Ciències de la Comunicacio Universität Zürich, IKMZ, Universität Zürich, IKMZ, Universitat Internacional de Catalunya, Barcelona, Spain
E-Mail: lcastro@uic.es l.castro@ikmz.uzh.ch

F. Oehmer-Pedrazzi et al. (Hrsg.), *Standardisierte Inhaltsanalyse in der Kommunikationswissenschaft – Standardized Content Analysis in Communication Research*, https://doi.org/10.1007/978-3-658-36179-2_27

articles using content analysis published in peer-reviewed journals ($n = 29$) over the last twenty years.[1] Studies were selected when they featured a quantitative content analysis and analyzed communication by political actors (politicians, parties, political organizations) during election times. Our review is based on 48 studies that were published between January 2000 and February 2020.

Our literature review shows that the field of election campaign communication has indeed attracted attention from many different disciplines. As an example, studies considered in this chapter have been published in communication science (58%), political science (22%), marketing (9%), sociology (9%), and in recent years in informatics (2%). We also noted that researchers' interest in election campaigns has intensified in recent years, with two-third of the studies being published in the last ten years. This also goes in line with previous research attesting to an increasing importance of campaigns to explain electoral outcomes, above and beyond more steady and traditional individual determinants of voting (party ID, class) (e.g., Scammell 2016) Electoral campaigns have also been drivers of important innovations over the last years, and their narrowcasting trends hold unprecedented potential to provide fine-grained insight on citizens' characteristics and political preferences ahead of decision-making processes (Hillygus and Shields 2008; Strömbäck and Kiousis 2014).

Due to the interdisciplinary nature of the field, studies in electoral campaign communication have focused on a broad variety of trends and objects of investigation, on different levels of analysis. To name but a few, we came across studies investigating differences in the communication strategies applied by female and male politicians (e.g., Carlson 2007; Hrbková and Macková 2020; McGregor et al. 2017), cross-cultural differences between individualistic and collectivistic societies (e.g., Chang 2000; Lee and Benoit 2004; Lee et al. 2016; Tak et al. 2007), studies questioning whether new technologies contribute to equalize opportunities to access the public sphere among smaller and bigger parties (e.g., Klinger 2013; Schweitzer 2008) or whether these technologies contribute to a more dialogic relationship between politicians and citizens (e.g., Graham et al. 2013; Graham et al. 2016). Other studies investigate how parties appeal to voters by use of populist communication (e.g., Casero-Ripollés et al. 2017; Jagers and Walgrave 2007) or identify the most successful campaigning strategies for communication via social media (e.g., Bene 2017; Keller and Kleinen-von Königslöw 2018; Staender et al. 2019).

In the following, we outline most frequent research designs and analytical constructs employed by these and further recent studies to content-analyze political messages

[1] Journal articles were searched via online data bases Google Scholar, Scopus, and Web of Science through the following search string: election AND campaign communication OR political advertising OR political advertisement AND content analysis. Studies were included in the sample if they applied content analysis to analyse different forms of campaign communication during election times by any kind of political actor.

and identify styles, actors and functions of political communication in election cycles. We finally identify main gaps in studies using content analysis to investigate election campaign communication trends, and provide directions for future research in the field.

2 Frequent Research Designs and Methodological Strategies

Focusing, firstly, on the methodological aspects and most frequently applied research designs, we find that only few studies ($n=6$; 13%) apply a multi-method design, for example combining content analysis with other methods such as surveys (Lipsitz 2018), experiments (Druckman et al. 2020), network analyses (Lukamto and Carson 2016), or expert interviews (Magin et al. 2017). Two studies also apply an additional qualitative content analysis (Carlson 2007; McGregor et al. 2017). Cross-sectional studies represent the majority of studies in our sample ($n=42$; 88%) and longitudinal research is comparatively scarce (see, e.g., Borah 2016; Druckman et al. 2009; Johnston and Kaid 2002; Lee et al. 2016; Schweitzer 2008; Steffan and Venema 2019).

A majority of studies use manual content analysis ($n=45$; 94%). Out of the 48 studies considered, only two studies apply semi-automatic content analysis (Lipsitz 2018; McGregor et al. 2017), three other studies make use of a fully automated content analysis (Lukamto and Carson 2016; Nulty et al. 2016; Vasko and Trilling 2019).

A large majority of the studies looks at communication by individual politicians ($n=34$; 70%) and/or political parties ($n=18$; 38%). Additionally, one study investigates independent political groups that supported different candidates in the presidential election by sponsoring TV ads (Johnston and Kaid 2002). Studies comparing different political actors (parties, politicians, and/or political interest groups) are rather unusual (Benoit and Airne 2009; Casero-Ripollés et al. 2017; Johnston and Kaid 2002).

In terms of international and comparative perspectives on election campaign communication, we find that a majority of studies are mono-country studies and six studies are two-country studies (Chang 2000; Graham et al. 2016; Lee et al. 2016; Lee and Benoit 2004; Magin et al. 2017; Tak et al. 2007). Only three studies are multi-country studies. Two of them include countries from the European Union (Nulty et al. 2016; Vesnic-Alujevic and van Bauwel 2014) and a single study takes into account a diverse set of countries from different World regions (Ceccobelli 2018). When we look at the geographic focus of the studies, Western democracies stand out. Most frequently, US elections have been the object of analysis, closely followed by studies on elections in European countries. Outside traditional Western democracies, elections from two Asian countries have been subject to investigation: Korea (Lee et al. 2016; Lee and Benoit 2004; Tak et al. 2007) and Taiwan (Chang 2000; Schafferer 2004). Beyond these geographic regions, research into the content of election campaign communication is still scarce, notable exceptions are studies from Australia (Lukamto and Carson 2016), Israel (Marmor-Lavie and Weimann 2008), and Pakistan (Ahmed and Skoric 2015). With

regards to the geographic scope of the studies considered, Ceccobelli (2018) presents one of the most extensive studies. Besides elections in the US and Europe, he looks at election campaign communication by politicians in many South American countries, as well as from Australia and New Zealand.

Only looking at the last twenty years, the advent of online communication tools has sparked new research in the field of election campaign communication research with a majority of studies looking into newer online communication channels ($n=24$; 50%). At the same time, offline channels remain important for research in this field ($n=21$; 47%). Interestingly, only two studies looked at both offline and online election campaign communication with the aim to compare them (Benoit 2000; Vafeiadis et al. 2018). Most specifically, the most prominent content-analyzed communication channel is TV advertising ($n=20$; 42%), followed by Facebook and Twitter, with each amounting roughly 20% ($n=9$). Content analyses of candidate websites make for 17% of the studies in our sample ($n=8$). Newer platforms for online political communication have not received much attention with one notable exception: four studies delve into campaign communication on YouTube (Borah et al. 2018; Erigha and Charles 2012; Shen 2012; Vesnic-Alujevic and van Bauwel 2014). As for previous categories (countries, actors), comparative studies which explicitly compare different communication channels are still an exception (e.g., Baranowski 2015; Lukamto and Carson 2016; McGregor et al. 2017; Schafferer 2004; Vafeiadis et al. 2018).

Finally, we found differences in the type of elections that have been studied with a majority of studies looking at parliamentary elections ($n=32$; 66%), followed by presidential elections ($n=13$; 28%), as well as gubernatorial ($n=6$; 13%) and senatorial ($n=4$; 8%) elections. The elections to the EU Parliament and the communication strategies applied therein have also generated a great deal of interest in the research field (e.g., Adam and Maier 2011; Nulty et al. 2016; Vesnic-Alujevic and van Bauwel 2014). While studies that investigate campaign communication in national elections make for the majority of studies, only a few studies have concentrated on regional elections (e.g., Baranowski 2015; Benoit 2000; Lukamto and Carson 2016). An even smaller part of the studies we selected conduct content analyses in multiple election campaigns (Benoit 2000; Benoit and Airne 2009; Lipsitz 2018) or different phases within the election cycle (Ceccobelli 2018; Vasko and Trilling 2019).

3 Main Analytical Constructs

In the following we describe main constructs employed in the studies using content analyses of election campaign communication reviewed in this chapter along four main categories, which we labelled *styles, topics*, *features,* and *functions.* A more comprehensive overview of studies on election campaign communication using these key constructs is presented in Table 1.

Table 1 Most frequently used constructs in content analysis of election campaign communication (own representation)

Style *(N=45)*	***Topic*** *(N=33)*	***Feature*** *(N=19)*	***Function*** *(N=15)*
Tone (Borah et al. 2018; Gunsch et al. 2000; Houghton et al. 2017; Kaid and Dimitrova 2005; S. Lee et al. 2016; Lukamto and Carson 2016; Rijkhoff and Ridout 2019; Shen 2012; Tak et al. 2007; Vasko and Trilling 2019) • **Negativity** (Druckman et al. 2009; Johnston and Kaid 2002; Lukamto and Carson 2016; Schweitzer 2008; Tedesco and Dunn 2019; Torres et al. 2012) • **Negative campaigning** (Steffan and Venema 2019) • **Attack** (Benoit 2000; Benoit and Airne 2009; Ceccobelli 2018; Erigha and Charles 2012; C. Lee and Benoit 2004; Schafferer 2004; Torres et al. 2012) • **Rebuttal/defense** (Benoit 2000; Benoit and Airne 2009; Borah 2016; C. Lee and Benoit 2004; Schafferer 2004) • **Acclaim** (Benoit 2000; Benoit and Airne 2009; Borah 2016; C. Lee and Benoit 2004) • **Endorsement** (Druckman et al. 2009, 2020; Torres et al. 2012; Vafeiadis et al. 2018) • **Comparison** (Borah 2016; Torres et al. 2012) **Personalization** (Bene 2017; Borah 2016; Bühlmann et al. 2016; Ceccobelli 2018; Druckman et al. 2009, 2020; Enli and Skogerbø 2013; Gunsch et al. 2000; Hrbková and Macková 2020; McGregor et al. 2017; Metz et al. 2019; Schweitzer 2008; Steffan and Venema 2019) • **Privatization** (Ceccobelli 2018) • **Intimacy** (Marmor-Lavie and Weimann 2008) • **Individualism/collectivism** (Chang 2000) **Emotionalization** (Bene 2017; Borah 2016; Gunsch et al. 2000; Keller and Kleinen-von Königslöw 2018; Vesnic-Alujevic and van Bauwel 2014)	**Policy focus** (Borah 2016; Borah et al. 2018; S. Lee et al. 2016; McGregor et al. 2017; Schweitzer 2008; Torres et al. 2012) • **Concreteness** (Johnston and Kaid 2002; C. Lee and Benoit 2004) • **Criticism of (opponents') policies** (Benoit 2000; Benoit and Airne 2009) **Issues** (Ahmed and Skoric 2015; Ceccobelli 2018; Erigha and Charles 2012; Graham et al. 2013; Johnston and Kaid 2002; Kaid and Dimitrova 2005; Lukamto and Carson 2016; Shen 2012; Tedesco and Dunn 2019; Vesnic-Alujevic and van Bauwel 2014) • **Domestic/national politics** (Bene 2017; Bühlmann et al. 2016; Vasko and Trilling 2019) • **Issue position** (Druckman et al. 2009, 2020) • **Long-term/shor-term orientation** (S. Lee et al. 2016) • **Issue ownership** (Druckman et al. 2009, 2020; Shen 2012; Staender et al. 2019) **Campaign focus** (Ahmed and Skoric 2015; Borah 2016; Ceccobelli 2018; McGregor et al. 2017; Schweitzer 2008) **Image focus** (Borah et al. 2018; Carlson 2007; Erigha and Charles 2012; Kaid and Dimitrova 2005; S. Lee et al. 2016; Schafferer 2004; Shen 2012; Tak et al. 2007; Tedesco and Dunn 2019; Torres et al. 2012; Vesnic-Alujevic and van Bauwel 2014)	**Channel** • **Type of Post** (Ahmed and Skoric 2015; Graham et al. 2013, 2016) • **Visuals** (Carlson 2007; Staender et al. 2019) • **Link** (Carlson 2007) • **Music** (Chang 2000) • **Polls** (Druckman et al. 2009) • **Video production characteristics** (Tak et al. 2007; Vesnic-Alujevic and van Bauwel 2014) • **Slogans** (Vesnic-Alujevic and van Bauwel 2014) • **Adoption** (Baranowski 2015; Carlson 2007; Jackson and Lilleker 2010; Koc-Michalska et al. 2014; Schweitzer 2008; Vesnic-Alujevic and van Bauwel 2014) **Time** (Ahmed and Skoric 2015; Rijkhoff and Ridout 2019; Schweitzer 2008; Staender et al. 2019) **Frequency** (Vasko and Trilling 2019) **Reactions** (Borah 2016; Borah et al. 2018; Staender et al. 2019; Vesnic-Alujevic and van Bauwel 2014)	**Information** (Bene 2017; Carlson 2007; Graham et al. 2013; Graham et al. 2016; Klinger 2013; Lukamto and Carson 2016; Magin et al. 2017; Schweitzer 2008; Shen 2012) **Interaction/engagement/ (pseudo-) discourse** (Ahmed and Skoric 2015; Bene 2017; Carlson 2007; Druckman et al. 2009; Graham et al. 2013; Graham et al. 2016; Hrbková and Macková 2020; Keller and Kleinen-von Königslöw 2018; Klinger 2013; Lukamto and Carson 2016; Magin et al. 2017; Schweitzer 2008) **Mobilization/ Participation** (Bene 2017; Carlson 2007; Keller and Kleinen-von Königslöw 2018; Klinger 2013; Magin et al. 2017) **Campaigning/persuasion** (Carlson 2007; Koc-Michalska et al. 2014) **E-representation** (Koc-Michalska et al. 2014) **Networking** (Carlson 2007) **Fundraising** (Carlson 2007)

(Continued)

Table 1 (Continued)

Style *(N = 45)*	***Topic*** *(N = 33)*	***Feature*** *(N = 19)*	***Function*** *(N = 15)*
• **Morality** (Lipsitz 2018) • **Fear** (Torres et al. 2012) • **Cynicism** (Rijkhoff and Ridout 2019) **Populism** (Casero-Ripollés et al. 2017; Jagers and Walgrave 2007) **Humor** (Bene 2017; Staender et al. 2019) **Entertainment** (Keller and Kleinen-von Königslöw 2018) **Explicity** (S. Lee et al. 2016) **Logic/cognition** (Gunsch et al. 2000; Johnston and Kaid 2002) **Symbols/metaphors** (Chang 2000) **Non-verbal cues** (Tak et al. 2007)	• **Character** (Benoit 2000; Benoit and Airne 2009; C. Lee and Benoit 2004) • **Expertise/leadership** (Druckman et al. 2009, 2020) • **Party** (Shen 2012) • **Race** (Erigha and Charles 2012) **Ideology/partisanship** (Druckman et al. 2009; Johnston and Kaid 2002; Steffan and Venema 2019) **Incumbency** (Druckman et al. 2009, 2020) **Voter story** (Vafeiadis et al. 2018) **Autobiographical story** (Vafeiadis et al. 2018)	**Length** (Gunsch et al. 2000; Vesnic-Alujevic and van Bauwel 2014)	

3.1 Styles

Tone. The question of whether political actors communicate positive messages or rather employ a more negative tone against their political opponents in election times has been the subject of a considerable amount of research in election campaign communication (e.g., Borah et al. 2018; Gunsch et al. 2000; Houghton et al. 2017; Kaid and Dimitrova 2005; Vasko and Trilling 2019) Nevertheless, evidence is still mixed, as to whether positive or negative political advertisement is more effective in election contexts, for example (Druckman and Parkin 2005; Norris et al. 1999). This mixed evidence in one of the most populated strands of literature in the field of election campaign communication (political advertising) may be in part rooted in different theoretical and methodological approaches to the study of the tone employed by election campaigners. Whereas a majority of the studies in our sample deal with the general message tone used within election campaign communication (e.g., Houghton et al. 2017; Rijkhoff and Ridout 2019; Vasko and Trilling 2019), a broad variety of related aspects and concepts have been investigated in the past. Most prominently, studies look specifically at the use of *negativity* in political communication during election times (e.g., Druckman et al. 2009; Johnston and Kaid 2002; Lukamto and Carson 2016). Within the concept *negativity*, sub-constructs such as **negative campaigning** (Steffan and Venema 2019) and neighboring concepts such as *attack* (Benoit 2000; Benoit and Airne 2009; Erigha and Charles 2012), *rebuttal* (Borah 2016; Lee and Benoit 2004; Schafferer 2004), *acclaims* (Benoit 2000; Benoit and Airne 2009; Borah 2016), and *comparisons* (Borah 2016; Torres et al. 2012) have also received substantial scholarly attention (for a detailed overview of how these constructs are conceptualized, see database).

Personalization. An election campaign is deemed to be highly personalized when it revolves around candidates and politicians instead of parties, institutions, or particular policy issues,"as well as when'non-political personality traits' of electoral contestants are emphasized" (Kriesi 2012, p. 826). As one of the traditional news values (Umbricht and Esser 2016), and with politicians increasingly adapting to the media logic (Strömbäck 2008), personalization becomes one of the most important features of election campaign communication. Together with the study of campaigners' message tone, personalization is one of the most frequently investigated concepts in election advertising (e.g., Enli and Skogerbø 2013; Hrbková and Macková 2020; McGregor et al. 2017; Metz et al. 2019; Steffan and Venema 2019).

Emotionalization. Emotionalization refers to the strategic use of emotions to target specific voters (Richards 2004). Emotional appeals range from inciting positive emotions like happiness or pride to negative emotions like anger and fear (Kaid and Johnston 1991) other studies looked at how politicians elicit emotions by using e.g. moral language (Lipsitz 2018). Prior research has demonstrated that using emotional appeals has an immediate effect on political attitudes and vote choices (Glaser and Salovey 1998; Way and Masters 1996). Together with personalization and message tone, emotionalization is the third major style addressed in studies on election campaign communication (e.g., Gunsch et al. 2000; Keller and Kleinen-von Königslöw 2018; Vesnic-Alujevic and van Bauwel 2014).

3.2 Topics

Issue. Election campaigns serve three main purposes, namely, introducing the candidate or party (*image*), raising issues, and stating where the candidate or the party stand on these issues and how they want to address the issue after success in the election (*policy*) (Nadeau et al. 2008). *R*esearch into specific issues raised in election campaign communication has gathered considerable attention, among others economy, social welfare, and environment (e.g., Kaid and Dimitrova 2005; Lukamto and Carson 2016; Vesnic-Alujevic and van Bauwel 2014). Some studies make a specific differentiation between issues on domestic and national politics (Bene 2017; Bühlmann et al. 2016; Vasko and Trilling 2019). More focused, another set of studies addresses the specific positions political contesters hold on different political issues (Druckman et al. 2009, 2020) or whether they address issues their party “own” (e.g., Shen 2012; Staender et al. 2019).

Policy. Election campaigners do not solely communicate, position themselves on, or even “own” certain issues but they also tend to make policy propositions thereof. Accordingly, a substantial amount of studies on election campaign communication also touch upon concrete proposals of how candidates or parties intend to implement specific political ideas or public policies (Lau and Redlawsk 2006). Mostly evaluated as a dichotomous category, studies look at whether campaign communication take up a policy or image focus (e.g., Borah et al. 2018; McGregor et al. 2017; Torres et al. 2012). Another set of studies look specifically at how concrete policy plans were put forward in election advertisements (Johnston and Kaid 2002; Lee and Benoit 2004), whether they adopt a long-term rather than a short term orientation (Lee et al. 2016), or the degree of criticism that specific policies elicit among political opponents (Benoit 2000; Benoit and Airne 2009).

Image. Often considered a dichotomous category, an image focus is treated as the antipode for communication strategies that focus on policies. The image focus displays the candidate and his qualities running for office (Johnston and Kaid 2002). When looking at the topics dealt with in election campaign communication, a significant part of the studies focused on image building for the candidates (e.g., Borah et al. 2018; Erigha and Charles 2012; Tedesco and Dunn 2019). Specifically, when investigating the image of the candidate, studies look into descriptions of the candidate’s character (Benoit 2000; Benoit and Airne 2009; Lee and Benoit 2004), their leadership skills (Druckman et al. 2009, 2020), and references to their party affiliation (Shen 2012).

3.3 Features

Channel. Mostly as a side interest, many studies investigate *how* a particular campaign message is being delivered and presented. Here, studies differentiate between, for instance, different types of messages (e.g., tweets, replies, or retweet) (e.g., Ahmed

and Skoric 2015; Graham et al. 2013), whether the communication includes (hyper-) links to other sites (Carlson 2007), visual, audio or video material (e.g., Chang 2000; Staender et al. 2019). Within this category, Another set of studies deal with the adoption of certain technological features to facilitate campaign communication. This strain of research concentrates mostly on candidate websites (e.g., Baranowski 2015; Jackson and Lilleker 2010; Koc-Michalska et al. 2014).

Reactions. With the advent of election campaign communication through social media, questions of how successful communication strategies have turned out have received increased attention in the field. Through their unique features, social media offers the opportunity to quantify successful strategies by evaluating likes/favors, shares/retweets and comments/replies a post/tweet has received (e.g., Bene 2017; Keller and Kleinen-von Königslöw 2018; Staender et al. 2019).

3.4 Functions

Information. Political actors communicate with their constituency and potential voters for many different purposes. One of such purposes is the provision of information (Nadeau et al. 2008). Usually through one-way communication, political actors inform the public about themselves and their stands on political issues, during the course of an election campaign (Magin et al. 2017). Numerous studies have developed different strategies to measure the function of information within election campaign communication, for example through counting the number of posts published throughout an election campaign or coding whether candidate messages provided news or factual information (e.g., Graham et al. 2013; Klinger 2013; Magin et al. 2017; Shen 2012).

Interaction. Politicians engage in interactions with potential voters in an attempt to gain their support. Unlike when providing information, the strategy of *interaction* mostly involves a dialogical communication between a political actor and (potential) voters, media representatives or other political actors (Graham et al. 2013). Also termed—among others—*discussion*, *engagement,* or (pseudo-) *discourse*, interaction is mostly examined in studies looking at communication in the context of Web 2.0 (e.g., Graham et al. 2016; Keller and Kleinen-von Königslöw 2018; Klinger 2013; Magin et al. 2017).

Mobilization. The last function of campaign communication we would like to highlight is political *mobilization* of citizens through e.g. canvassing, donating, spreading the campaign message within their social network (Schweitzer 2008) and ultimately cast their vote. Like the functions of information and interaction, mobilization can be achieved through the use of certain technological features. One of such instance is facilitating the sharing of campaign content or online forms to register as volunteers (Koc-Michalska et al. 2014; Schweitzer 2008), as well as through targeted communication strategies to attract followers to engage in specific (online or offline) specific actions (e.g., Bene 2017; Klinger 2013; Magin et al. 2017).

4 Desiderata and Directions for Future Research

A majority of studies examined in this chapter[22]At this point, we would like to note that our sample of international studies published in English cannot represent the field in its entirety and that future meta-analyses or reviews considering research published in languages other than English, older studies and other forms of publication (non-journal publications) may offer further and valuable insight into the field. suggest that manual content analyses of traditional forms of political communication (political discourses, political ads) in either TV or online platforms from a particular country are the norm in the empirical literature on election campaign communication. However, a number of scholars have pointed at an ever-increasing central role of new forms and specific techniques of online election campaign communication, such as video sharing, interactions through social networks, podcasting, blogging, political web sites or social bots distributing political messages (Dimitrova et al. 2014; Zuiderveen Borgesius et al. 2018), that are relatively uncharted territory in content analyses of campaign communication.

Against this background, the question arises as how online and offline communication modes complement each other, what forms, messages and styles of campaigning are associated to each of them, and which purposes and functions they fulfill. Much research lies ahead to outline and identify the main characteristics, formats and contents of newer forms of election campaign communication, and how they are combined with more traditional means to reach out specific electorates.

As others have highlighted (Blumler and McQuail 2016; Esser 2019), our literature review also evidences a scarcity of studies dealing with the interplay between new and more traditional modes of campaign communication from a *comparative* perspective. Overall, more cross-national research (across Western and non-Western latitudes) would be needed to account for national, cross-national, and transnational trends in campaign communication. The comparative angle should be extended as to explore patterns in political communication during election and non-election times, as well as long term trends. Future research should also devote its attention to bridging and harmonizing strands of literature on political actors' campaign communication and trends in media reporting (see chapter on election campaign coverage in this volume) (Esser 2019).

On a methodological note, the Internet provides boundless opportunities to dive into the communication of a broad variety of actors, topics, and platforms across different media and political landscapes, beyond those kernelled in this chapter. New computational approaches to content analyses (see chapter on Automated content analysis in this volume), validated with manual techniques or more qualitative approaches can ease the task of discriminating meaningful analytical constructs and consistent patterns in campaign communication, and represent a promising research avenue for the years to come.

Relatedly, new forms of election campaign communication will also need to be revisited with an eye on the receivers' end. So-called political microtargeting, big-data and sophisticated analytical tools are allowing politicians to address constituencies' specific

concerns, identities and tastes with an unprecedented precision virtually everywhere in the Western world (Kosinski et al. 2015). Studies dealing with campaign communication effects need to better account for implications of new modes of political communication consumption, as opportunities to interact with citizens increase. As better tools to grasp the behavior and mood of political information users come to the fore, it is expected that political campaigns will be designed and conceived to fulfill the needs and adapt to new "media multitaskers", inadvertent political information consumers or people engaging in second-screening by e.g. watching a TV debate while tweeting about it. Researchers using content-analytical tools to investigate communication by political leaders, parties or interest groups will need to consider such new information use patterns and increased interdependencies between the political supply and demand sides when analyzing and making sense of political messages across different platforms.

Acknowledgements We are thankful to Francesca Mueller for excellent research assistance.

Relevant Variables in DOCA—Database of Variables for Content Analysis

Negative campaigning: https://doi.org/10.34778/4g
Interaction: https://doi.org/10.34778/4f

References

Adam, S., & Maier, M. (2011). National parties as politicizers of EU integration? Party campaign communication in the run-up to the 2009 European Parliament election. *European Union Politics*, *12*(3), 431–453.

Ahmed, S., & Skoric, M. (2015). Twitter and 2013 Pakistan General Election: The case of David 2.0 against Goliaths. In I. Boughzala, M. Janssen, & S. Assar (Eds.), *Case studies in e-government 2.0: changing citizen relationships* (pp. 139–161). Cham: Springer International Publishing.

Baranowski, P. (2015). Online political campaigning during the 2014 regional elections in Poland. *Media and Communication*, *3*(4), 35–44.

Bene, M. (2017). Go viral on the Facebook! Interactions between candidates and followers on Facebook during the Hungarian General Election campaign of 2014. *Information, Communication & Society*, *20*(4), 513–529.

Benoit, W. L. (2000). A functional analysis of political advertising across media, 1998. *Communication Studies*, *51*(3), 274–295.

Benoit, W. L., & Airne, D. (2009). Non-presidential political advertising in campaign 2004. *Human Communication*, *12*(1), 91–117.

Blumler, J. G., & McQuail, D. (2016). "As it was in the beginning…". In C. Holtz-Bacha (Ed.), *Europawahlkampf 2014 : Internationale Studien zur Rolle der Medien: [European Election Campaign 2014: International Studies on the Role of the Media]* (pp. 15–34). Wiesbaden: Springer Fachmedien Wiesbaden.

Borah, P. (2016). Political Facebook use: Campaign strategies used in 2008 and 2012 presidential elections. *Journal of Information Technology & Politics*, *13*(4), 326–338.

Borah, P., Fowler, E., & Ridout, T. N. (2018). Television vs. YouTube: Political advertising in the 2012 presidential election. *Journal of Information Technology & Politics*, *15*(3), 230–244.

Bühlmann, M., Zumbach, D., & Gerber, M. (2016). Campaign strategies in the 2015 Swiss national elections: Nationalization, coordination, and personalization. *Swiss Political Science Review*, *22*(1), 15–28.

Carlson, T. (2007). It's a man's world? *Journal of Political Marketing*, *6*(1), 41–67.

Casero-Ripollés, A., Sintes-Olivella, M., & Franch, P. (2017). The populist political communication style in action: Podemos's issues and functions on Twitter during the 2016 Spanish general election. *American Behavioral Scientist*, *61*(9), 986–1001.

Ceccobelli, D. (2018). Not every day is election day: A comparative analysis of eighteen election campaigns on Facebook. *Journal of Information Technology & Politics*, *15*(2), 122–141.

Chang, C. (2000). Political advertising in Taiwan and the US: Across-cultural comparison of the 1996 presidential election campaigns. *Asian Journal of Communication*, *10*(1), 1–17.

De Vreese, C. H. (2017). Comparative political communication research. In K. Kenski & K. Hall Jamieson (Eds.), *Oxford Handbook. The Oxford Handbook of Political Communication* (pp. 287–300). New York: Oxford University Press.

Dimitrova, D. V., Shehata, A., Strömbäck, J., & Nord, L. W. (2014). The effects of digital media on political knowledge and participation in election campaigns. *Communication Research*, *41*(1), 95–118.

Druckman, J. N., Kifer, M. J., & Parkin, M. (2009). Campaign communications in U.S. congressional elections. *American Political Science Review*, *103*(3), 343–366.

Druckman, J. N., Kifer, M. J., & Parkin, M. (2020). Campaign rhetoric and the incumbency advantage. *American Politics Research*, *48*(1), 22–43.

Druckman, J. N., & Parkin, M. (2005). The impact of media bias: How editorial slant affects voters. *The Journal of Politics*, *67*(4), 1030–1049.

Enli, G. S., & Skogerbø, E. (2013). Personalized campaigns in party-centred politics: Twitter and Facebook as arenas for political communication. *Information, communication & society*, *16*(5), 757–774.

Erigha, M., & Charles, C. Z. (2012). Other, uppity Obama: A content analysis of race appeals in the 2008 U.S. presidential election. *Du Bois Review: Social Science Research on Race*, *9*(2), 439–456.

Esser, F. (2019). Comparative international studies of election campaign communication: What should happen next? *Journalism: Theory, Practice & Criticism*, *20*(8), 1124–1138.

Esser, F., & Strömbäck, J. (2013). Comparing election campaign communication. In F. Esser & T. Hanitzsch (Eds.), *The Handbook of Comparative Communication Research* (pp. 289–307). London: Routledge.

Glaser, J., & Salovey, P. (1998). Affect in electoral politics. *Personality and Social Psychology Review*, *2*(3), 156–172.

Graber, M. A. (2005). From republic to democracy: The judiciary and the political process. In K. L. Hall & K. T. McGuire (Eds.), *Institutions of American Democracy. Institutions of American Democracy* (pp. 401–431). Oxford: Oxford University Press.

Graham, T., Broersma, M., Hazelhoff, K., & van 't Haar, G. (2013). Between broadcasting political messages and interacting with voters. *Information, Communication & Society*, *16*(5), 692–716.

Graham, T., Jackson, D., & Broersma, M. (2016). New platform, old habits? Candidates' use of Twitter during the 2010 British and Dutch General Election campaigns. *New Media & Society*, *18*(5), 765–783.

Gunsch, M. A., Brownlow, S., Haynes, S. E., & Mabe, Z. (2000). Differential forms linguistic content of various of political advertising. *Journal of Broadcasting & Electronic Media*, *44*(1), 27–42.

Hillygus, D. S., & Shields, T. G. (2008). *The persuadable voter: Wedge issues in presidential campaigns*. Princeton, N.J: Princeton University Press.

Houghton, D., Hamdan, Z. A., & Marder, B. (2017). Political campaigning on Twitter--The use of language, message tone, and implications for political marketing communication from the UK General Election 2015. In M. Stieler (Ed.), *Creating marketing magic and innovative future marketing trends* (pp. 1413–1419). Cham: Springer International Publishing.

Hrbková, L., & Macková, A. (2020). Campaign like a girl? Gender and communication on social networking sites in the Czech parliamentary election. *Information, Communication & Society*, *71*(2), 1–18.

Jackson, N., & Lilleker, D. G. (2010). Tentative steps towards interaction. *Internet Research*, *20*(5), 527–544.

Jagers, J., & Walgrave, S. (2007). Populism as political communication style: An empirical study of political parties' discourse in Belgium. *European Journal of Political Research*, *46*(3), 319–345.

Johnston, A., & Kaid, L. L. (2002). Image ads and issue ads in U.S. presidential advertising: Using videostyle to explore stylistic differences in televised political ads from 1952 to 2000. *Journal of Communication*, *52*(2), 281–300.

Kaid, L. L., & Dimitrova, D. V. (2005). The television advertising battleground in the 2004 presidential election. *Journalism Studies*, *6*(2), 165–175.

Kaid, L. L., & Johnston, A. (1991). Negative versus positive television advertising in US presidential campaigns, 1960-1988. *Journal of Communication*, *41*(3), 53–64.

Keller, T. R., & Kleinen-von Königslöw, K. (2018). Pseudo-discursive, mobilizing, emotional, and entertaining: Identifying four successful communication styles of political actors on social media during the 2015 Swiss national elections. *Journal of Information Technology & Politics*, *15*(4), 358–377.

Klinger, U. (2013). Mastering the art of social media. *Information, Communication & Society*, *16*(5), 717–736.

Koc-Michalska, K., Lilleker, D. G., Surowiec, P., & Baranowski, P. (2014). Poland's 2011 online election campaign: New tools, new professionalism, new ways to win votes. *Journal of Information Technology & Politics*, *11*(2), 186–205.

Kosinski, M., Matz, S. C., Gosling, S. D., Popov, V., & Stillwell, D. (2015). Facebook as a research tool for the social sciences: Opportunities, challenges, ethical considerations, and practical guidelines. *American Psychologist*, *70*(6), 543–556.

Kriesi, H. (2012). Personalization of national election campaigns. *Party Politics*, *18*(6), 825–844.

Lau, R. R., & Redlawsk, D. P. (2006). *How voters decide: Information processing in election campaigns*. Cambridge, MA: Cambridge University Press.

Lee, C., & Benoit, W. L. (2004). A functional analysis of presidential television spots: A comparison of Korean and American ads. *Communication Quarterly*, *52*(1), 68–79.

Lee, S., Khang, H., & Kim, Y. (2016). A cross-cultural perspective on televised political advertising during the presidential election between the US and South Korea: 1992–2012. *Asian Journal of Communication*, *26*(2), 133–152.

Lipsitz, K. (2018). Playing with emotions: The effect of moral appeals in elite rhetoric. *Political Behavior*, *40*(1), 57–78.

Lukamto, W., & Carson, A. (2016). Politweets: Social media as a platform for political engagement between Victorian politicians and citizens. *Communication Research and Practice*, *2*(2), 191–212.

Magin, M., Podschuweit, N., Haßler, J., & Russmann, U. (2017). Campaigning in the fourth age of political communication. A multi-method study on the use of Facebook by German and Austrian parties in the 2013 national election campaigns. *Information, Communication & Society*, *20*(11), 1698–1719.

Marmor-Lavie, G., & Weimann, G. (2008). Intimacy appeals in Israeli televised political advertising. *Political Communication*, *25*(3), 249–268.

McGregor, S. C., Lawrence, R. G., & Cardona, A. (2017). Personalization, gender, and social media: Gubernatorial candidates' social media strategies. *Information, Communication & Society*, *20*(2), 264–283.

Metz, M., Kruikemeier, S., & Lecheler, S. (2019). Personalization of politics on Facebook: Examining the content and effects of professional, emotional and private self-personalization. *Information, Communication & Society*, *33*(3), 1–18.

Nadeau, R., Nevitte, N., Gidengil, E., & Blais, A. (2008). Election campaigns as information campaigns: Who learns what and does it matter? *Political Communication*, *25*(3), 229–248.

Norris, P., Curtice, J., Sanders, D., Scammell, M., & Semetko, H. A. (1999). *On message: Communicating the campaign*. London: Sage.

Nulty, P., Theocharis, Y., Popa, S. A., Parnet, O., & Benoit, K. (2016). Social media and political communication in the 2014 elections to the European Parliament. *Electoral Studies*, *44*, 429–444.

Richards, B. (2004). The emotional deficit in political communication. *Political Communication*, *21*(3), 339–352.

Rijkhoff, S. A.M., & Ridout, T. N. (2019). Your lying, incompetent and selfish member of Congress: Cynical appeals in U.S. Senate advertising. *The Social Science Journal*, *56*(1), 38–47.

Scammell, M. (2016). *Designer politics: How elections are won*. London: Springer.

Schafferer, C. (2004). Content analysis of newspaper and television advertisements: A case study of Taiwan's 2004 Presidential Election. *Modern East Asia*, *3*(4), 1–19.

Schweitzer, E. J. (2008). Innovation or normalization in e-campaigning? *European Journal of Communication*, *23*(4), 449–470.

Shen, F. (2012). Informational/Transformational appeals in political advertising: An analysis of the advertising strategies of 2010 U.S. gubernatorial campaigns. *Journal of Nonprofit & Public Sector Marketing*, *24*(1), 43–64.

Staender, A., Ernst, N., & Steppat, D. (2019). Was Steigert die Facebook-Resonanz? Eine Analyse der Likes, Shares und Comments im Schweizer Wahlkampf 2015: [What triggers teactions on Facebook? An analysis of the likes, shares and comments in the Swiss election campaign 2015]. *Studies in Communication | Media*, *8*(2), 236–271.

Steffan, D., & Venema, N. (2019). Personalised, de-ideologised and negative? A longitudinal analysis of campaign posters for German Bundestag elections, 1949–2017. *European Journal of Communication*, *34*(3), 267–285.

Strömbäck, J. (2008). Four phases of mediatization: An analysis of the mediatization of politics. *The International Journal of Press/Politics*, *13*(3), 228–246.

Strömbäck, J., & Kiousis, S. (2014). Strategic political communication in election campaigns. In C. Reinemann (Ed.), *Handbooks of Communication Science /HoCS]: Vol. 18. Political Communication* (pp. 109–128). Berlin: de Gruyter Mouton.

Tak, J., Lee Kaid, L., & Khang, H. (2007). The reflection of cultural parameters on videostyles of televised political spots in the US and Korea. *Asian Journal of Communication*, *17*(1), 58–77.

Tedesco, J. C., & Dunn, S. W. (2019). Political advertising in the 2016 U.S. presidential election: Ad hominem ad nauseam. *American Behavioral Scientist*, *63*(7), 935–947.

Torres, I. M., Hyman, M. R., & Hamilton, J. (2012). Candidate-sponsored TV ads for the 2004 U.S. presidential election: A content analysis. *Journal of Political Marketing*, *11*(3), 189–207.
Umbricht, A., & Esser, F. (2016). The push to popularize politics. *Journalism Studies*, *17*(1), 100–121.
Vafeiadis, M., Li, R., & Shen, F. (2018). Narratives in political advertising: An analysis of the political advertisements in the 2014 midterm elections. *Journal of Broadcasting & Electronic Media*, *62*(2), 354–370.
Vasko, V., & Trilling, D. (2019). A permanent campaign? Tweeting differences among members of Congress between campaign and routine periods. *Journal of Information Technology & Politics*, *16*(4), 342–359.
Vesnic-Alujevic, L., & van Bauwel, S. (2014). YouTube: A political advertising tool? A case study of the use of YouTube in the Campaign for the European Parliament elections 2009. *Journal of Political Marketing*, *13*(3), 195–212.
Way, B. M., & Masters, R. D. (1996). Emotion and cognition in political information-processing. *Journal of Communication*, *46*(3), 48–65.
Zuiderveen Borgesius, F. J., Möller, J., Kruikemeier, S., Ó Fathaigh, R., Irion, K., Dobber, T., . . . de Vreese, C. H. (2018). Online political microtargeting: Promises and threats for democracy. *Utrecht Law Review*, *14*(1), 82–96.

Desiree Steppat is a research consultant at the Landesanstalt für Medien NRW Impressum in Düsseldorf. Her research focuses on news use, perceptions of alternative and mainstream journalism, and comparative media research.

Prof. Dr. Laia Castro is a senior research and teaching associate at the Department of Communication and Media Research (IKMZ) at the University of Zurich and adjunct professor at Universitat Internacional de Catalunya—Barcelona. She received her PhD in Social Sciences from the University of Fribourg in 2017. Her main research interests lie at the intersection of political communication, international and comparative media research and public opinion.



Content Analysis in the Research Field of Public Diplomacy

Sarah Marschlich

1 Introduction

Public diplomacy research in the realm of communication science has increased significantly since 2009 (Sevin et al. 2019), particularly in public relations and strategic organizational communication studies. Public diplomacy is generally conceived as a strategic communication instrument comprising different communication methods to inform and engage with foreign publics in order to advance the interests of nation-states (Gregory 2008; Snow 2009). In this regard, public diplomacy efforts seek to contribute to positive attitudes and beliefs toward a nation, its citizens, and its economic or political affairs. This may result in a positive country image (White 2015) as well as the attraction of foreign publics, for instance, through appealing policies, cultures, and values, which can be referred to as soft power (Melissen 1999; Nye 2004). While one research strand describes public diplomacy as the exclusive instrument of nation-states or governments (Signitzer and Coombs 1992; Snow 2009), a second research strand also includes non-state actors who communicate with foreign publics (Cull 2009; Gilboa 1998; L'Etang 2009; Wang 2006), thereby consciously or unconsciously contributing to (home) country interests (White 2015) or the organizational goals of other actors (Cull 2009).

S. Marschlich (✉)
Universität Zürich, IKMZ, Zurich, Schweiz
E-Mail: s.marschlich@ikmz.uzh.ch

F. Oehmer-Pedrazzi et al. (Hrsg.), *Standardisierte Inhaltsanalyse in der Kommunikationswissenschaft – Standardized Content Analysis in Communication Research*, https://doi.org/10.1007/978-3-658-36179-2_28

Public diplomacy significantly overlaps with (international) public relations[1] in terms of the focus on the role of public diplomacy in fostering mutual understanding between nation-states and building long-term relationships between international actors and nations and their foreign publics (Fitzpatrick 2007; Gregory 2008). In order to promote mutual interests, influence the perception of a country, or negotiate on the international level, the media, including social media and global news coverage on countries and government officials, play an essential role (Gilboa 1998, 2001). In addition to media-induced communication, public diplomacy includes communication in the context of policy decision-making, strategic communication such as communication through government official websites, and international events (Nye 2004), all aiming to inform, advocate, and engage (Fitzpatrick 2007).

In this chapter, I adapt the first research perspective and focus on research on public diplomacy as the communication efforts of a nation (including those of the government itself and institutions that speak on behalf of the government) in advancing national interests and, ultimately, affecting the perception of a nation. In this regard, previous research has examined either subjects (communicators of public diplomacy messages) or objectives of public diplomacy communication.

2 Commonly used research designs in public diplomacy research

A recent meta-analysis of public diplomacy research demonstrated the increasing prominence of public diplomacy research across various research fields, with communication studies making up the highest number of public diplomacy studies since 1965 (Sevin et al. 2019). Research in this field has mainly focused on analyzing how countries and their related entities are portrayed in newspapers or represent themselves over long periods (Metzgar and Su 2017; Golan and Lukito 2017; Rettig and Avraham 2016; Zhang et al. 2016), during political (O'Boyle 2019) or sporting (Zhou et al. 2013) events, or in times of conflict or crisis (Jungblut 2017; Sheafer et al. 2014) in order to come to conclusions about agenda-building effects and implications for the perceived country image. However, only a few scholars have actually investigated the public and their reactions to public diplomacy communication efforts, or the relationships between public diplomacy actors and their publics, to show evidence of their interactions, for instance, on social media (Park and Lim 2014; Samuel-Azran et al. 2019; Zhong and Lu 2013) and the construction of a country's image (e.g., through Google Search, see Ingenhoff et al. 2020).

[1] For a comparison of public relations and public diplomacy, see Signitzer and Coombs (1992) and Fitzpatrick (2007).

Public diplomacy research uses different research designs, including quantitative content analysis (e.g., Collins et al. 2019; Lee 2007; Zhang et al. 2018) and qualitative analysis (e.g., Avraham 2014) or, occasionally, a mixture of the two (Golan 2013; Rettig and Avraham 2016; White and Radic 2014). Although an increasing amount of potential research data, particularly social media content, has been examined using automated content analysis, to date, this method has only played a minor role in public diplomacy research (Huang and Wang 2019; Sheafer et al. 2014). Furthermore, scholars have combined content analysis with other methods, particularly network analysis, in order to further explore key influencers, opinion leaders, or alliances in public diplomacy communities as well as information flows (e.g., Park and Lim 2014; Sevin and Ingenhoff 2018; Yang and Taylor 2014). Other methods used in combination with content analysis are employed only occasionally, including surveys that allow researchers to attribute public diplomacy messaging strategies to the effects on the perceptions of a country (e.g., Ingenhoff et al. 2020; Zhang et al. 2016). Moreover, scholars have analyzed frames as a way of drawing conclusions about how particular issues related to a country are portrayed (e.g., Golan and Lukito 2017) or the extent to which a country is depicted as a friend or enemy (Golan 2013). However, previous public diplomacy research using content analysis has been dominated by descriptive quantitative research designs.

As the meta-analysis of Sevin and colleagues (2019) revealed, most researchers employ case studies of specific countries when it comes to research on public diplomacy, which has been dominated by studies on China (e.g., Golan and Lukito 2017; Huang and Wang 2019; Zhang et al. 2016). In addition to the focus on Chinese public diplomacy, scholars have frequently explored public diplomacy in Russia (e.g., Golan and Viatchaninov 2013; Simons 2014), the United States (e.g., Entman 2008), and Western European countries (mainly Germany and the United Kingdom) (e.g., Jungblut 2017; Zhou et al. 2013).

3 Main constructs employed in content analyses on public diplomacy

Previous research has often conceptualized public diplomacy as one-way communication and, therefore, mainly analyzed traditional mass media outlets as the primary senders of country-related information (Bonomi and Pan 2013; Golan 2013; Golan and Lukito 2017; Metzgar and Su 2017; Rettig and Avraham 2016; Zhou et al. 2013). Most of these studies focused on all sections of a newspaper, while a few scholars took a closer look at opinion-emphasizing newspaper sections, including the editorial and “op-ed” (i.e., opposite the editorial page). These studies sought to find out more about the valence of issues involved and recurring media frames in order to show the implications of international public opinion regarding countries or country-related events (Golan 2013; Golan and Lukito 2017).

With digitalization, new communication technologies, and new opportunities to communicate with foreign publics, research has increasingly examined public diplomacy in the context of social media and other digital communication channels. In this regard, research has been conducted on the organizational level, examining social media accounts, embassy websites (Dodd and Collins 2017; Zhong and Lu 2013), ministries of foreign affairs (Song and Bian 2016; White and Radic 2014), and official governmental agencies (Yang and Taylor 2014). On the individual level, research has explored the public diplomacy communication strategies of government officials through their websites, micro-blogs, or social media accounts (Huang and Wang 2019; O'Boyle 2019).

Based on the literature reviewed above, the research on public diplomacy is diverse in terms of research topics, objects, and methods. However, only a few constructs and variables have been similarly explored through or in combination with content analysis. Commonly used constructs are presented below.

1. *General occurrence and salience of themes:* Numerous studies have analyzed topics in the news coverage concerning foreign countries, foreign country policies, or events taking place in foreign countries (e.g., Bonomi and Pan 2013; Jungblut 2017; Zhang et al. 2018; Zhou et al. 2013). Similarly, other scholars have focused on the **salience of topics** that governments or government representatives discuss on their official channels when speaking to foreign publics (Zhong and Lu 2013). These studies indicate that traditional media coverage about specific countries varies significantly. Overall, the news media has often depicted countries' culture and heritage, including sports and music (Zhou et al. 2013), along with political and economic topics (Golan and Lukito 2017), while government-led communication has focused on bilateral relations and country politics along with cultural exchanges (Zhong and Lu 2013).
2. *Evaluation of topics:* Previous studies have examined how certain country-related topics are evaluated, including issue frames and issue tone, in order to draw conclusions about the perception of the country and its representatives, which may affect diplomatic relations (Bonomi and Pan 2013; Golan and Lukito 2017; Metzgar and Su 2017). For instance, scholars have explored how issues that might be critical for international diplomatic relationships—such as corruption, bilateral differences, or political reforms—are framed in foreign news media (Bonomi and Pan 2013; Golan and Lukito 2017). Bonomi and Pan (2013) found that the negative media portrayals of the diplomatic relationship between the Venezuelan and U.S. governments remained the same over a research period of eight years. They concluded that issue frames relating to countries hardly changed over time, affecting their image in the long term (Bonomi and Pan 2013). Similarly, Golan and Lukito (2017) found that the same issue frames occurred across media outlets in the case of news coverage on China in leading U.S. media outlets (Golan and Lukito 2017).

3. *Visibility and prominence of actors:* Studies have explored important actors that are either presented in news media coverage or governments' public diplomacy messages (Jungblut 2017; Sevin and Ingenhoff 2018; Zhang et al. 2018). Moreover, studies have examined actors serving as sources of public diplomacy messages, such as diplomats, government agencies, and non-state actors. For instance, Jungblut (2017) found that government-led communication mostly focused on actors of their own government.
4. *Evaluation of governmental/diplomatic actors:* Some studies have explored how public diplomacy actors are characterized and evaluated by foreign news media (Bonomi and Pan 2013; Zhang et al. 2018) or social media users (O'Boyle 2019). For instance, O'Boyle (2019) showed that the Twitter comments of foreign presidents during diplomatic visits differed in tone depending on the home or foreign country public. Accordingly, participants tended to comment on their home country diplomats in a more positive way and in a more neutral way on foreign diplomats. Bonomi and Pan (2013) revealed that the attribution of foreign politicians could change over time, for instance, from portraying a president as "a military man" to an enemy of a foreign country.
5. *Networks of public diplomacy actors and their publics:* In order to examine how public diplomacy actors connect with their publics, previous research has examined the relationships and networks of these actors, mostly by analyzing the social media accounts of politicians (Huang and Wang 2019; Sevin and Ingenhoff 2018; Yang and Taylor 2014). Studies have found that, in general, public diplomacy communication reaches a wide variety of other important actors, particularly on social media (Huang and Wang 2019; Sevin and Ingenhoff 2018). Yang and Taylor (2014) explored the communication networks of Chinese government officials by identifying key participants (Chinese government agencies, international and Chinese NGOs) and the structural characteristics of the public diplomacy network, measured as similarities among actors and events. They indicated that particularly international NGOs are of great relevance to the government's public diplomacy efforts due to the perceived credibility and expertise of NGOs (Yang and Taylor 2014).
6. *Framing of country-related themes:* Analyses of frames on public diplomacy communication have been broadly utilized, with the application of different approaches to framing (Golan 2013; Jungblut 2017; Yang and Taylor 2014). Some studies have applied Entmans' (1993) definition of frames by analyzing framing elements, including problem definition and problem solution (Golan and Lukito 2017; Jungblut 2017; Rettig and Avraham 2016). Others have used Iyengar's (1996) framing approach and examined emerging thematic and episodic frames (Metzgar and Su 2017) to detect how certain topics are presented. Overall, prior research has found that issue frames of a certain topic or conflict differ between government-led public diplomacy and news coverage on foreign countries (Jungblut 2017) but are similar across media outlets (Golan and Lukito 2017). Moreover, media frames can change over time due to the communication efforts of external, non-governmental actors,

such as the United Nations, in emphasizing the role of non-state actors in public diplomacy (Metzgar and Su 2017).

7. *Public diplomacy modes:* One study (Dodd and Collins 2017) compared the **public diplomacy approaches** of various embassies by analyzing the different modes of public diplomacy based on the public diplomacy model (Cull 2008): advocacy, listening, international news broadcasting, cultural diplomacy, and exchange diplomacy. Dodd and Collins (2017) found that the public diplomacy efforts of Western European embassies mostly consisted of advocating for particular country policies among foreign publics, while Central Eastern European embassies mostly engaged in the promotion of cultural goods.
8. *Country image:* Most studies have only implicitly drawn conclusions about the effects of public diplomacy on the public perception of a country by content analyzing media coverage or government-led communication. However, a few studies have explored public communication concerning countries in order to explore which dimensions of a country's image can be identified in country-related content on Twitter (Sevin and Ingenhoff 2018) or through search engines such as Google (Ingenhoff et al. 2020). According to the existing research, when talking or thinking about a country, people mostly relate it to functional aspects such as politics and economics as well as cultural and nature-related characteristics (Ingenhoff et al. 2020; Sevin and Ingenhoff 2018), depending on geographical proximity (Ingenhoff et al. 2020).

4 Research desiderata

Although the number of studies on public diplomacy has increased considerably in the last ten years, the field is still relatively young in comparison to other subfields in the domain of communication and media studies (Sevin et al. 2019). Therefore, empirical studies and the application of content analysis are not yet as diverse as in other communication and media studies fields. This is also reflected in the small variety of actors investigated in the existing studies. The majority of studies still focus on traditional mass media or the same countries and regions. In times of increased usage of digital media for entertainment or "infotainment," this dearth of research calls for further studies on social media and entertainment-oriented media as well as studies focusing on communication channels other than text-based ones, including audio-visual analyses on television, YouTube, and Instagram.

Moreover, future content analyses should make greater use of longitudinal data and compare different points in time in order to better understand the evolution and institutionalization of public diplomacy as well as the positive and negative developments or trends in specific public diplomacy cases. There is also a need for research on non-Western countries. In addition, as outlined earlier, previous research has not yet exhausted the social media opportunities relating to the study of public diplomacy. Content analysis, in combination with network analysis, offers various opportunities for

examining the interactions and relationships between governments, international NGOs, corporations, media, individual journalists, and/or citizens on social media. Thus, future research could analyze how messages emerge, spread, and change within networks or which actors are involved in these dynamics. Therefore, future research should account for additional actors, including government and media actors (e.g., Rettig and Avraham 2016; Sevin and Ingenhoff 2018).

Finally, previous content analyses have tried to attribute the potential effects of public diplomacy communication to the public perceptions of countries. So far, only a few studies have combined content analysis with other methods, such as surveys (Ingenhoff et al. 2020; White and Radic 2014; Zhang et al. 2016), and the analysis of Google Search (Ingenhoff et al. 2020) to understand how public diplomacy communication may influence citizens' views of government officials and entire countries. These studies have demonstrated the value of combining content analysis with other methods in public diplomacy research and call for further research applying mixed-methods designs.

Relevant Variables in DOCA—Database of Variables for Content Analysis

Issue salience: https://doi.org/10.34778/4i
Attribute salience: https://doi.org/10.34778/4h
Public diplomacy message strategy: https://doi.org/10.34778/4j

References

Avraham, E. (2014). Spinning liabilities into assets in place marketing: Toward a new typology. *Place Branding and Public Diplomacy, 10*(3), 174–185.

Bonomi, V., & Pan, P.-L. (2013). Framing of the US-Venezuela diplomatic relationship in major US newspapers. *Journal of International Communication, 19*(2), 235–251.

Collins, S. D., DeWitt, J. R., & LeFebvre, R. K. (2019). Hashtag diplomacy: Twitter as a tool for engaging in public diplomacy and promoting US foreign policy. *Place Branding and Public Diplomacy, 15*(2), 78–96.

Cull, N. J. (2008). Public diplomacy: Taxonomies and histories. *The ANNALS of the American Academy of Political and Social Science, 616*(1), 31–54.

Cull, N. J. (2009). *Public diplomacy: Lessons from the past*. Figuera Press.

Dodd, M. D., & Collins, S. J. (2017). Public relations message strategies and public diplomacy 2.0: An empirical analysis using Central-Eastern European and Western embassy Twitter accounts. *Public Relations Review, 43*(2), 417–425.

Entman, R. M. (1993). Framing: Toward clarification of a fractured paradigm. *Journal of Communication, 43*(4), 51–58.

Entman, R. M. (2008). Theorizing mediated public diplomacy: The U.S. case. *The International Journal of Press/Politics, 13*(2), 87–102.

Fitzpatrick, K. (2007). Advancing the new public diplomacy: A public relations perspective. *The Hague Journal of Diplomacy, 2*(3), 187–211.

Gilboa, E. (1998). Media diplomacy: Conceptual divergence and applications. *Harvard International Journal of Press/Politics, 3*(3), 56–75.

Gilboa, E. (2001). Diplomacy in the media age: Three models of uses and effects. *Diplomacy & Statecraft, 12*(2), 1–28.
Golan, G. J. (2013). The gates of op-ed diplomacy: Newspaper framing the 2011 Egyptian revolution. *International Communication Gazette, 75*(4), 359–373.
Golan, G. J., & Lukito, J. (2017). Newspaper editorial pages frame China similarly. *Newspaper Research Journal, 38*(2), 215–230.
Golan, G. J., & Viatchaninova, E. (2013). Government social responsibility in public diplomacy: Russia's strategic use of advertorials. *Public Relations Review, 39*(4), 403–405.
Gregory, B. (2008). Public diplomacy sunrise of an academic field. *The Annals of the American Academy of Political and Social Science, 616,*274–290.
Huang, Z. A., & Wang, R. (2019). The New 'Cat' of the Internet: China's Panda Diplomacy on Twitter. In F. Frandsen, W. Johansen, R. Tench, & S. Romenti (Eds.), *BIG IDEAS in Public Relations Research and Practice* (pp. 69–85). Emerald Publishing Limited.
Ingenhoff, D., Segev, E., & Chariatte, J. (2020). The construction of country images and stereotypes: From public views to Google searches. *International Journal of Communication*, *14,* 92–113.
Iyengar, S. (1996). Framing responsibility for political issues. *The ANNALS of the American Academy of Political and Social Science, 546*(1), 59–70.
Jungblut, M. (2017). Between sealed borders and welcome culture: Analyzing mediated public diplomacy during the European migrant crisis. *Journal of Communication Management, 21*(4), 384–398.
Lee, S. (2007). International public relations as a predictor of prominence of US news coverage. *Public Relations Review, 33*(2), 158–165.
L'Etang, J. (2009). Public relations and diplomacy in a globalized world: An issue of public communication. *American Behavioral Scientist, 53*(4), 607–626.
Melissen, J. (1999). *The new public diplomacy. Soft power in international relations.* Palgrave Macmillan.
Metzgar, E. T., & Su, J. (2017). Friends from afar?: American media coverage of China's Confucius institutes. *Journalism Practice, 11*(8), 1000–1025.
Nye, J. S. (2004). *Soft power: The means to success in world politics*. Public Affairs (Perseus Books Group).
O'Boyle, J. (2019). Twitter diplomacy between India and the United States: Agenda-building analysis of tweets during presidential state visits. *Global Media and Communication, 15*(1), 121–134.
Park, S. J., & Lim, Y. S. (2014). Information networks and social media use in public diplomacy: A comparative analysis of South Korea and Japan. *Asian Journal of Communication, 24*(1), 79–98.
Rettig, E., & Avraham, E. (2016). The role of intergovernmental organizations in the "battle over framing": The case of the Israeli–West Bank separation barrier. *The International Journal of Press/Politics, 21*(1), 111–133.
Samuel-Azran, T., Ilovici, B., Zari, I., & Geduild, O. (2019). Practicing citizen diplomacy 2.0: "The hot dudes and hummus—Israel's yummiest" campaign for Israel's branding. *Place Branding and Public Diplomacy, 15*(1), 38–49.
Sevin, E., & Ingenhoff, D. (2018). Public diplomacy on social media: Analyzing networks and content. *International Journal of Communication*, *12,* 3663–3685.
Sevin, E., Metzgar, E. T., & Hayden, C. (2019). The scholarship of public diplomacy: Analysis of a growing field. *International Journal of Communication*, *13,* 4814–4837.
Sheafer, T., Shenhav, S. R., Takens, J., & van Atteveldt, W. (2014). Relative political and value proximity in mediated public diplomacy: The effect of state-level homophily on international frame building. *Political Communication, 31*(1), 149–167.

Signitzer, B. H., & Coombs, T. (1992). Public relations and public diplomacy: Conceptual convergences. *Public Relations Review, 18*(2), 137–147.
Simons, G. (2014). Russian public diplomacy in the 21st century: Structure, means and message. *Public Relations Review, 40*(3), 440–449.
Snow, N. (2009). Rethinking public diplomacy. In N. Snow & P. M. Taylor (Eds.), *Routledge handbook of public diplomacy* (pp. 3–11). Routledge.
Song, L., & Bian, Q. (2016). The EU through the eyes of Chinese social media: A case study of the official micro-blog of Chinese Foreign Ministry. *International Communication Gazette, 78*(1–2), 64–82.
Wang, J. (2006). Public diplomacy and global business. *Journal of Business Strategy, 27*(3), 41–49.
White, C. (2015). Exploring the role of private-sector corporations in public diplomacy. *Public Relations Inquiry, 4*(3), 305–321.
White, C., & Radic, D. (2014). Comparative public diplomacy: Message strategies of countries in transition. *Public Relations Review, 40*(3), 459–465.
Yang, A., & Taylor, M. (2014). Public diplomacy in a networked society: The Chinese government–NGO coalition network on acquired immune deficiency syndrome prevention. *International Communication Gazette, 76*(7), 575–593.
Zhang, T., Khalitova, L., Myslik, B., Mohr, T. L., Kim, J. Y., & Kiousis, S. (2018). Comparing Chinese state-sponsored media's agenda-building influence on Taiwan and Singapore media during the 2014 Hong Kong Protest. *Chinese Journal of Communication, 11*(1), 66–87.
Zhang, X., Wasserman, H., & Mano, W. (2016). China's expanding influence in Africa: Projection, perception and prospects in Southern African countries. *Communication, 42*(1), 1–22.
Zhong, X., & Lu, J. (2013). Public diplomacy meets social media: A study of the U.S. embassy's blogs and micro-blogs. *Public Relations Review, 39*(5), 542–548.
Zhou, S., Shen, B., Zhang, C., & Zhong, X. (2013). Creating a competitive identity: Public diplomacy in the London Olympics and media portrayal. *Mass Communication & Society, 16*(6), 869–887.

Sarah Marschlich is a senior research and teaching associate at the Department of Communication and Media Research (IKMZ) at the University of Zurich. She received her PhD in Social Sciences from the University of Fribourg in 2020. In her research, she focuses on strategic communication of corporations, organizational legitimacy, and corporate diplomacy.



Content Analysis in the Research Field of Disinformation

Anna Staender und Edda Humprecht

1 Introduction

Various recent events, such as the COVID-19 pandemic or the European elections in 2019, were marked by the discussion about potential consequences of the massive spread of misinformation, disinformation, and so-called "fake news." Scholars and experts argue that fears of manipulated elections can undermine trust in democracy, increase polarization, and influence citizens' attitudes and behaviors (Benkler et al. 2018; Tucker et al. 2018). This has led to an increase in scholarly work on disinformation, from less than 400 scientific articles per year before 2016 to about 1'500 articles in 2019[1].

One initial challenge for this field of research is the definition and conceptualization of the phenomenon. Researchers have discussed different terms, including misinformation (non-intentional deception), disinformation (intentional deception), and mal-information (harmful content) (Wardle and Derakhshan 2017). Research

[1] Search terms: misinformation OR disinformation OR "fake news" (July 2nd, 2020; Web of Science).

A. Staender (✉)
Universität Zürich, IKMZ, Zurich, Switzerland
E-Mail: a.staender@ikmz.uzh.ch

E. Humprecht
Department of Sociology and Political Science, Norwegian University of Science and Technology, Trondheim, Norwegen
E-Mail: edda.humprecht@ntnu.no

F. Oehmer-Pedrazzi et al. (Hrsg.), *Standardisierte Inhaltsanalyse in der Kommunikationswissenschaft – Standardized Content Analysis in Communication Research*, https://doi.org/10.1007/978-3-658-36179-2_29

often examined the phenomenon of disinformation, as it is relevant from a democratic theory perspective and can have serious societal consequences. The term refers to fabricated news reports and decontextualized information, but is sometimes also used in relationship with similar concepts, such as conspiracy theories, propaganda, or rumors (Freelon and Wells 2020; Tandoc et al. 2018). However, empirical research often fails to determine clearly whether false information was disseminated deliberately or inadvertently (Freelon and Wells 2020). Furthermore, it is argued that the term "fake news" is politized and used for different purposes in both scholarly articles and in the news (Quandt et al. 2019). Thus, Egelhofer and Lecheler (2019) suggest to differentiate between the "fake news label" used by politicians, for example, to discredit news media, and the "fake news genre" (e.g. fabricated news reports).

Recent communication research in the field of disinformation has mainly dealt with online and social media environments. Researchers argue that although the phenomenon is not new, it is seems to be precisely these environments where disinformation spreads massively because it can be easily disseminated by users.Thus, a large audience can be reached and possibly manipulated (Miller and Vaccari 2020; Vosoughi et al. 2018).

2 Common Research Designs and Combination of Methods

The concept of disinformation is studied across various disciplines, e.g. social sciences, computer science, medicine, or law. Within social sciences, surveys and experiments dominated in the last few years—presumably because of the societal need to answer urgent questions regarding *exposure* (Allcott and Gentzkow 2017; Grinberg et al. 2019; Guess et al. 2020), *concerns* (European Commission 2018; Jang and Kim 2018), or *digital literacy* and *the ability to recognize disinformation* (Pennycook et al. 2018; Roozenbeek and van der Linden 2019; Vraga and Tully 2019). Moreover, scholars frequently investigated connected concepts such as *knowledge* (Amazeen and Bucy 2019), *traits and beliefs* (Anthony and Moulding 2019; Petersen et al. 2018), or credibility of and *trust* in the news media and public actors (Newman et al. 2018; Zimmermann and Kohring 2020). Content analysis is used less frequently and studies conducting content analyses mostly use automated approaches or mixed methods designs (Amazeen et al. 2019; Chadwick et al. 2018; Grinberg et al. 2019; Guess et al. 2019). Those studies link survey data to digital trace data in order to examine who is exposed to disinformation, and which users interact with disinformation and for what reason. For example, Guess et al. (2019) link a representative survey to behavioral data on Facebook and identify age and political ideology as relevant factors explaining the willingness to share mis- and disinformation. Such approaches go beyond self-reported activities on social media but pose challenges in terms of storing personal data. Besides the methodological approaches, research frequently focuses on samples from the U.S. and analyzes social media platforms, such as Twitter and Facebook (Allcott et al. 2019; Bovet and Makse 2019; Grinberg et al. 2019; Guess et al. 2019; Ross and Rivers 2018).

It should be noted that the samples are often a result of limited data access by platforms (Bruns 2019; Freelon 2018; Puschmann 2019) and that user data from other relevant channels such as messenger services (e.g. WhatsApp) are difficult to access for research (Rossini et al. 2020). Moreover, research on disinformation mostly focuses on specific issues and real-world events, such as election campaigns or times of crises. This poses challenges for the comparability and replication of studies.

3 Main Constructs

Despite the increasing interest in the subject, this is a rather young field of research. Therefore, the following research areas and analytical constructs should be understood as a current snapshot of recent years, and not yet as an overview of saturated research fields. However, the various approaches with content analyses can be summarized in five areas, which are neither exhaustive nor disjunctive. In these studies, the identification and operationalization of disinformation is a crucial part which often poses challenges. The identification of disinformation is of great interest since it is relevant for research in two ways: detection of disinformation for sampling purposes and the automated detection as an own object of research. Since these two objectives may overlap in the future, a distinction is made between manual (see 1) and automated identification (see 2) of disinformation.

1. Manual detection of disinformation. To manually detect and operationalize disinformation, research mainly follows two approaches, which Li (2020, p. 126) labels as *story* or *source.* Focusing on **sources**, studies are not primarily concerned with the falseness of information, but with the producers and publishers of false messages (Grinberg et al. 2019). In this context, several authors have argued that alternative right-wing media are potential disseminators of disinformation (Figenschou and Ihlebæk 2019; Post 2019). So far, research has predominantly focused on the US (Guess et al. 2018; Lazer et al. 2018; Nelson and Taneja 2018). To foster comparative research from a territorial (national information environments), as well as from a temporal (ephemerality of certain alternative media sites) perspective, key dimensions and typologies of alternative media need to be established (Frischlich et al. 2020; Holt et al. 2019).

The story-based approach for the identification of disinformation uses single false stories or lists of false claims (Allcott and Gentzkow 2017; Humprecht 2019) published by factchecking websites (e.g. snopes.com, politifact.com, factcheck.org), or news media (e.g. The Guardian, The Washington Post, Buzzfeed). Studies in this area (Al-Rawi et al. 2019; Ferrara 2020; Graham et al. 2020; Graham and Keller 2020; Hindman and Barash 2018; Metaxas and Finn 2019) analyze content on Twitter using hashtags referring to specific false claims (#pizzagate), events (#covid19), or a combination of both (#australienbushfires, #ArsonEmergency).

2. Automated detection of disinformation: Besides the manual detection of disinformation, automated approaches are frequently applied. Automated detection

approaches are superior to manual approaches in terms of capacity, veracity, and ephemerality (Zhang and Ghorbani 2020). They also allow the identification of a multitude of possible actors as well as human or non-human distributers (e.g. social bots, Shao et al. 2018).

According to the extensive overview work by Zhang and Ghorbani (2020, p. 11), state-of-the-art research-based detection approaches are: Component-based (creator-, content-, and context analysis), data mining-based (supervised learning: deep learning, machine learning, unsupervised learning), implementation-based (online, offline), and platform-based (social media, other online news platforms) methods. The authors point at current challenges and future studies needed in the field of unsupervised learning, such as (i) *cluster analysis* to identify homogenous content and authors, (ii) *outlier analysis* of abnormal behavior of objects, (iii) *embedding technologies* of natural language processing as an important component of the detection processes (Word2vec, FastText, Sent2vec, Doc2vec), and (iv) *semantic similarity analysis* to detect near-duplicate content (Zhang and Ghorbani 2020, pp. 19–21). The latter is especially relevant regarding the identification of decontextualized information.

3. Dissemination of disinformation: Exploring the dissemination and spread of false messages presents another strand of research, especially in the social sciences. In research on the dissemination of disinformation, three main foci can be distinguished: 1) *diffusion,* 2) *amplification* and 3) *strategy.* (1) Research focusing on *diffusion* examines the spread of false messages and focuses on the amount of user interactions with "fake sources" or "fake stories" over time (Allcott et al. 2019). In addition, research explores what **types** of content users are sharing across different countries (Bradshaw et al. 2020; Marchal et al. 2020; Neudert et al. 2019). To further investigate the origin and variations of content, studies compared the original sender (incl. implemented links, e.g. from alternative media sites) and modifications of the content of false and real stories with evolutionary tree analysis (Jang et al. 2018), or analyzed if initial publications reappear and if they modify over time using time series analysis and text similarity (Shin et al. 2018). Moreover, studies using content or network analysis frequently analyze the extent and reach of disinformation. Those studies identify an increased potential exposure towards disinformation among ideologically homogeneous and polarized communities (Bessi et al. 2016; Del Vicario et al. 2016; Hjorth and Adler-Nissen 2019; Schmidt et al. 2018; Shin et al. 2017; Walter et al. 2020). (2) Regarding *amplifications*, research investigates how dissemination processes can be driven or amplified by the news media. Research seem to agree on the agenda-setting power of false messages and alternative media sites (Rojecki and Meraz 2016; Tsfati et al. 2020), but some studies also relativize its influence (Vargo et al. 2018). (3) Research on *strategic* coordination, for example, investigates how rumors actively turn into a disinformation campaign by applying document-driven multi-site trace ethnography (Krafft and Donovan 2020). Another study by Keller et al. (2020) focuses on actors and the identification and validation of astroturfing agents. Lukito (2020) uses a different approach and investigates the temporally coordination of a disinformation campaign, namely IRA activities, with time series analysis (2015–2017) on several social media platforms (Facebook, Twitter, Reddit).

4. Content of disinformation: Another strand of research focusses on the content of disinformation. Studies in this area have been conducted in various filed, including political communication, health and science communication (Brennen et al. 2020; Wang et al. 2019). The aim of these—so far few—studies is to identify different types of disinformation. Thus, this research area is of crucial importance for the conceptualization of disinformation. The two studies presented here both find and highlight that online disinformation is not only a technology-driven phenomenon, but additionally defined by partisanship, identity politics and national information environments (Humprecht 2019; Mourão and Robertson 2019). Humprecht (2019) qualitatively identifies different types of online disinformation and finds cross-national differences by quantitatively analyzing **topics,** speakers, and target objects of fact-checked disinformation articles. Mourão and Robertson (2019) investigate sensationalism, bias, clickbait and misinformation of "Fake News"-sites and analyzed which articles and components triggered engagement on social media.

5. User participation: Digital interactions of users on online or social media can be investigated not only in terms of what content attracts attention and spreads (for example via the number of shares/retweets), but also in terms of how people respond to certain messages in terms of liking or commenting. Barfar (2019) analyzed emotions, incivility and cognitive thinking in the comments of Facebook posts by automated text analysis (using the *Linguistic inquiry and word count* dictionary, see Pennebaker et al. 2007) and compared posts with true and false claims. Additionally, a study by Introne et al. (2018) examines online discussions within specific issue-related forums on a website called "abovetopsecret". The authors applied discourse-, narrative- and content analysis in order to investigate how false narratives are constructed.

4 Research Desiderata

Research on disinformation has considerably increased in recent years, but there are still some significant gaps, e.g. in terms of comparative research, dimensions and typologies, and methods.

Debarking from the 2016 presidential elections in the U.S., many studies have focused on the role of disinformation in the context of this election campaign. As a result, findings were generalized without considering the different political and media opportunity structures in the individual countries. However, some notable exceptions show that significant differences exist between countries regarding various aspects of disinformation (Humprecht et al. 2020; Neudert et al. 2019). In order to enable comparative research, established criteria for sampling of disinformation sources are needed, e.g. of alternative media that potentially disseminate disinformation.

An important contribution to the state of research would also be the investigation of key features of disinformation by means of content analyses, e.g. types and forms of

presentation of disinformation. This would both enable reproducibility and strengthen the theoretical discourse (Freelon and Wells 2020).

Moreover, research has largely neglected to role of news media in the dissemination of disinformation (Tsfati et al. 2020). It has been argued that news media act as multiplicators for disinformation, e.g. by republishing social media posts of political actors. Another promising, but not yet sufficiently researched aspect is the use of the term “fake news” by political actors to discredit the media. This is an important aspect against the background of increasing polarization and mistrust in news media in many countries (Egelhofer and Lecheler 2019).

Methodologically, the detection of disinformation is probably the greatest challenge for current research. To be able to compare the extent of the spread of disinformation between different platforms and countries, established dictionaries and identifiers are needed. More importantly, researchers need better access to the data of platform operators. For future research, it would be desirable that platform operators cooperate with researchers and make the data available in a transparent manner so that the production and dissemination of disinformation can be scientifically traced.

To sum up, the field of research on disinformation offers great potential for content analysis research. Moreover, combinations of automated and manual content analysis could be very fruitful with regard to the research gaps mentioned above.

Relevant Variables in DOCA—Database of Variables for Content Analysis

Publishers/sources: https://doi.org/10.34778/4c
Topics: https://doi.org/10.34778/4d
Types: https://doi.org/10.34778/4e

References

Allcott, H., & Gentzkow, M. (2017). Social media and fake news in the 2016 election. *Journal of Economic Perspectives*, *31*(2), 211–236.

Allcott, H., Gentzkow, M., & Yu, C. (2019). Trends in the diffusion of misinformation on social media. *Research & Politics*, *6*(2).

Al-Rawi, A., Groshek, J., & Zhang, L. (2019). What the fake? Assessing the extent of networked political spamming and bots in the propagation of #fakenews on Twitter. *Online Information Review*, *43*(1), 53–71.

Amazeen, M. A., & Bucy, E. P. (2019). Conferring resistance to digital disinformation: The inoculating influence of procedural news knowledge. *Journal of Broadcasting & Electronic Media*, *63*(3), 415–432.

Amazeen, M. A., Vargo, C. J., & Hopp, T. (2019). Reinforcing attitudes in a gatewatching news era: Individual-level antecedents to sharing fact-checks on social media. *Communication Monographs*, *86*(1), 112–132.

Anthony, A., & Moulding, R. (2019). Breaking the news: Belief in fake news and conspiracist beliefs. *Australian Journal of Psychology*, *71*(2), 154–162.

Barfar, A. (2019). Cognitive and affective responses to political disinformation in Facebook. *Computers in Human Behavior*, *101*, 173–179.

Benkler, Y., Faris, R., & Roberts, H. (2018). *Network propaganda: Manipulation, disinformation, and radicalization in American politics*. New York: Oxford University Press.

Bessi, A., Petroni, F., Vicario, M. D., Zollo, F., Anagnostopoulos, A., Scala, A., . . . Quattrociocchi, W. (2016). Homophily and polarization in the age of misinformation. *The European Physical Journal Special Topics*, *225*(10), 2047–2059.

Bovet, A., & Makse, H. A. (2019). Influence of fake news in Twitter during the 2016 US presidential election. *Nature Communications*, *10*(1), 1–14.

Bradshaw, S., Howard, P. N., Kollanyi, B., & Neudert, L.-M. (2020). Sourcing and automation of political news and information over social media in the United States, 2016-2018. *Political Communication*, *37*(2), 173–193.

Brennen, A. J. S., Simon, F. M., Howard, P. N., & Nielsen, R. K. (2020). *Types, sources, and claims of COVID-19 misinformation.* Oxford University Press, April, 1–13.

Bruns, A. [Axel] (2019). After the 'APIcalypse': social media platforms and their fight against critical scholarly research. *Information, Communication & Society*, *22*(11), 1544–1566.

Chadwick, A., Vaccari, C., & O'Loughlin, B. (2018). Do tabloids poison the well of social media? Explaining democratically dysfunctional news sharing. *New Media & Society*, *20*(11), 4255–4274.

Del Vicario, M., Bessi, A., Zollo, F., Petroni, F., Scala, A., Caldarelli, G., . . . Quattrociocchi, W. (2016). The spreading of misinformation online. *Proceedings of the National Academy of Sciences of the United States of America*, *113*(3), 554–559.

Egelhofer, J. L., & Lecheler, S. (2019). Fake news as a two-dimensional phenomenon: A framework and research agenda. *Annals of the International Communication Association*, *43*(2), 97–116.

European Commission (2018). *Report on the implementation of the Communication 'Tackling online disinformation: a European approach'*. Retrieved from https://www.europeansources.info/record/report-on-the-implementation-of-the-communication-tackling-online-disinformation-a-european-approach/

Ferrara, E. (2020). What types of COVID-19 conspiracies are populated by Twitter bots? *First Monday.* Advance online publication.

Figenschou, T. U., & Ihlebæk, K. A. (2019). Media criticism from the far-right: Attacking from many angles. *Journalism Practice*, *13*(8), 901–905.

Freelon, D. (2018). Computational research in the post-API age. *Political Communication*, *35*(4), 665–668.

Freelon, D., & Wells, C. (2020). Disinformation as political communication. *Political Communication*, *37*(2), 145–156.

Frischlich, L., Klapproth, J., & Brinkschulte, F. (2020). Between mainstream and alternative – Co-orientation in right-wing populist alternative news media. In C. Grimme, M. Preuss, F. W. Takes, & A. Waldherr (Eds.), *Lecture Notes in Computer Science. Disinformation in open online media* (Vol. 12021, pp. 150–167). Cham: Springer International Publishing.

Graham, T., Bruns, A., Zhu, G., & Campbell, R. (May 2020). *Like a virus: The coordinated spread of coronavirus disinformation*. Retrieved from https://d3n8a8pro7vhmx.cloudfront.net/theausinstitute/pages/3316/attachments/original/1590956846/P904_Like_a_virus_-_COVID19_disinformation__Web_.pdf?1590956846

Graham, T., & Keller, T. R. (2020, January 10). Bushfires, bots and arson claims: Australia flung in the global disinformation spotlight. *The Conversation*. Retrieved from https://theconversation.

com/bushfires-bots-and-arson-claims-australia-flung-in-the-global-disinformation-spot-light-129556
Grinberg, N., Joseph, K., Friedland, L., Swire-Thompson, B., & Lazer, D. (2019). Fake news on Twitter during the 2016 U.S. Presidential election. *Science (New York, N.Y.)*, *363*(6425), 374–378.
Guess, A., Nagler, J., & Tucker, J. (2019). Less than you think: Prevalence and predictors of fake news dissemination on Facebook. *Science Advances*, *5*(1).
Guess, A., Nyhan, B., & Reifler, J. (2018). Selective exposure to misinformation: Evidence from the consumption of fake news during the 2016 US presidential campaign. *European Research Council*, *9*(3), 1–14.
Guess, A. M., Nyhan, B., & Reifler, J. (2020). Exposure to untrustworthy websites in the 2016 US election. *Nature Human Behaviour*, *4*(5), 472–480.
Hindman, M., & Barash, V. (2018). *Disinformation, 'fake news' and influence campaigns on Twitter*. Retrieved from Knight Foundation website: https://www.issuelab.org/resources/33163/33163.pdf
Hjorth, F., & Adler-Nissen, R. (2019). Ideological asymmetry in the reach of pro-Russian digital disinformation to United States audiences. *Journal of Communication*, *69*(2), 168–192.
Holt, K., Ustad Figenschou, T., & Frischlich, L. [Lena] (2019). Key dimensions of alternative news media. *Digital Journalism*, *7*(7), 860–869.
Humprecht, E. (2019). Where 'fake news' flourishes: a comparison across four Western democracies. *Information, Communication & Society*, *22*(13), 1973–1988.
Humprecht, E., Esser, F., & van Aelst, P. (2020). Resilience to online disinformation: A framework for cross-national comparative research. *The International Journal of Press/Politics*. Advance online publication. doi: https://doi.org/10.1177/1940161219900126
Introne, J., Gokce Yildirim, I., Iandoli, L., DeCook, J., & Elzeini, S. (2018). How people weave online information into pseudoknowledge. *Social Media + Society*, *4*(3).
Jang, S. M., Geng, T., Queenie Li, J.-Y., Xia, R., Huang, C.-T., Kim, H., & Tang, J. (2018). A computational approach for examining the roots and spreading patterns of fake news: Evolution tree analysis. *Computers in Human Behavior*, *84*, 103–113.
Jang, S. M., & Kim, J. K. (2018). Third person effects of fake news: Fake news regulation and media literacy interventions. *Computers in Human Behavior*, *80*, 295–302.
Keller, F. B., Schoch, D., Stier, S., & Yang, J. (2020). Political astroturfing on Twitter: How to coordinate a disinformation campaign. *Political Communication*, *37*(2), 256–280.
Krafft, P. M., & Donovan, J. (2020). Disinformation by design: The use of evidence collages and platform filtering in a media manipulation campaign. *Political Communication*, *37*(2), 194–214.
Lazer, D. M. J., Baum, M. A., Benkler, Y., Berinsky, A. J., Greenhill, K. M., Menczer, F., . . . Zittrain, J. L. (2018). The science of fake news. *Science (New York, N.Y.)*, *359*(6380), 1094–1096.
Li, J. (2020). Toward a research agenda on political misinformation and corrective information. *Political Communication*, *37*(1), 125–135.
Lukito, J. (2020). Coordinating a multi-platform disinformation campaign: Internet research agency activity on three U.S. social media platforms, 2015 to 2017. *Political Communication*, *37*(2), 238–255.
Marchal, N., Kollanyi, B., Neudert, L.-M., Au, H., & Howard, P. N. (2020). *Junk news & information sharing during the 2019 UK general election*. Retrieved from http://arxiv.org/pdf/2002.12069v1
Metaxas, P., & Finn, S. (2019). Investigating the unfamous #Pizzagate conspiracy theory. *Technology Science*. Retrieved from https://techscience.org/a/2019121802

Miller, M. L., & Vaccari, C. (2020). Digital threats to democracy: Comparative lessons and possible remedies. *The International Journal of Press/Politics*. Advance online publication. doi: https://doi.org/10.1177/1940161220922323

Mourão, R. R., & Robertson, C. T. (2019). Fake news as discursive integration: An analysis of sites that publish false, misleading, hyperpartisan and sensational information. *Journalism Studies*, *20*(14), 2077–2095.

Nelson, J. L., & Taneja, H. (2018). The small, disloyal fake news audience: The role of audience availability in fake news consumption. *New Media & Society*, *20*(10), 3720–3737.

Neudert, L.-M., Howard, P., & Kollanyi, B. (2019). Sourcing and automation of political news and information during three European elections. *Social Media + Society*, *5*(3).

Newman, N., Fletcher, R., Kalogeropoulos, A., Levy, D., & Nielsen, R. K. (2018). *Reuters Institute Digital News Report 2018*. Retrieved from https://ssrn.com/abstract=3245355

Pennebaker, J., Francis, M., & Booth, R. (2007). *Linguistic inquiry and word count: A computer-based text analysis program [Computer software]*. Austin, TX: LIWC.net.

Pennycook, G., Cannon, T. D., & Rand, D. G. (2018). Prior exposure increases perceived accuracy of fake news. *Journal of Experimental Psychology. General*, *147*(12), 1865–1880.

Petersen, M., Osmundsen, M., & Arceneaux, K. (2018). A 'need for chaos' and the sharing of hostile political rumors in advanced democracies. *PsyArXiv Preprint*.

Post, S. (2019). Polarizing communication as media effects on antagonists. Understanding communication in conflicts in digital media societies. *Communication Theory*, *29*(2), 213–235.

Puschmann, C. (2019). An end to the wild west of social media research: a response to Axel Bruns. *Information, Communication & Society*, *22*(11), 1582–1589.

Quandt, T., Frischlich, L., Boberg, S., & Schatto-Eckrodt, T. (2019). Fake news. *The International Encyclopedia of Journalism Studies*, *2019*, 1–6.

Rojecki, A., & Meraz, S. (2016). Rumors and factitious informational blends: The role of the web in speculative politics. *New Media & Society*, *18*(1), 25–43.

Roozenbeek, J., & van der Linden, S. (2019). The fake news game: actively inoculating against the risk of misinformation. *Journal of Risk Research*, *22*(5), 570–580.

Ross, A. S., & Rivers, D. J. (2018). Discursive deflection: Accusation of "fake news" and the spread of mis- and disinformation in the Tweets of president Trump. *Social Media + Society*, *4*(2).

Rossini, P., Stromer-Galley, J., Baptista, E. A., & Veiga de Oliveira, V. (2020). Dysfunctional information sharing on WhatsApp and Facebook: The role of political talk, cross-cutting exposure and social corrections. *New Media & Society*. Advance online publication. doi: https://doi.org/10.1177/1461444820928059

Schmidt, A. L., Zollo, F., Scala, A., Betsch, C., & Quattrociocchi, W. (2018). Polarization of the vaccination debate on Facebook. *Vaccine*, *36*(25), 3606–3612.

Shao, C. et al. (2018) 'The spread of low-credibility content by social bots', Nature communications. Springer US, 9(1), p. 4787.

Shin, J., Jian, L., Driscoll, K., & Bar, F. (2017). Political rumoring on Twitter during the 2012 US presidential election: Rumor diffusion and correction. *New Media & Society*, *19*(8), 1214–1235.

Shin, J., Jian, L., Driscoll, K., & Bar, F. (2018). The diffusion of misinformation on social media: Temporal pattern, message, and source. *Computers in Human Behavior*, *83*, 278–287.

Tandoc, E. C., Lim, Z. W., & Ling, R. (2018). Defining "fake news". *Digital Journalism*, *6*(2), 137–153.

Tsfati, Y., Boomgaarden, H. G., Strömbäck, J., Vliegenthart, R., Damstra, A., & Lindgren, E. (2020). Causes and consequences of mainstream media dissemination of fake news: Literature review and synthesis. *Annals of the International Communication Association*, *44*(2), 157–173.

Tucker, J., Guess, A., Barbera, P., Vaccari, C., Siegel, A., Sanovich, S., . . . Nyhan, B. (2018). Social media, political polarization, and political disinformation: A review of the scientific literature. *SSRN Electronic Journal.* Advance online publication. doi: https://doi.org/10.2139/ssrn.3144139

Vargo, C. J., Guo, L., & Amazeen, M. A. (2018). The agenda-setting power of fake news: A big data analysis of the online media landscape from 2014 to 2016. *New Media & Society*, *20*(5), 2028–2049.

Vosoughi, S., Roy, D., & Aral, S. (2018). The spread of true and false news online. *Science (New York, N.Y.)*, *359*(6380), 1146–1151.

Vraga, E. K., & Tully, M. (2019). News literacy, social media behaviors, and skepticism toward information on social media. *Information, Communication & Society*, 1–17.

Walter, D., Ophir, Y., & Jamieson, K. H. (2020). Russian Twitter accounts and the partisan polarization of vaccine discourse, 2015-2017. *American Journal of Public Health*, *110*(5), 718–724.

Wang, Y., McKee, M., Torbica, A., & Stuckler, D. (2019). Systematic literature review on the spread of health-related misinformation on social media. *Social Science & Medicine, 240*(September), 112552.

Wardle, C., & Derakhshan, H. (2017). Information disorder: Toward an interdisciplinary framework for research and policy making. *Council of Europe Report*, *27*.

Zhang, X., & Ghorbani, A. A. (2020). An overview of online fake news: Characterization, detection, and discussion. *Information Processing & Management*, *57*(2).

Zimmermann, F., & Kohring, M. (2020). Mistrust, disinforming news, and vote choice: A panel survey on the origins and consequences of believing disinformation in the 2017 German parliamentary election. *Political Communication*, *37*(2), 215–237.

Anna Staender is a PhD student at the Department of Communication and Media Research, University of Zurich. Her research interests focus on online disinformation, social media research and political communication in comparative perspective.

Prof. Dr. Edda Humprecht is a Associate Professor at the Norwegian University of Science and Technology (NTNU) and Senior Research and Teaching Associate at UZH. Her research focuses on disinformation, political news, and media systems.





Content Analysis in the Research Field of Corporate Communication

Juliane A. Lischka

1 Introduction

Corporate communication is an interdisciplinary concept that is approached from marketing, public relations (PR), organizational communication, and linguistic perspectives. In marketing, the role of corporate communication for loyal relationships with stakeholders is central. In PR, it is the managing of dialogic relations with an organization's publics. For organizational communication, the social co-creation of the process of organizing is in focus (Mazzei 2014). In linguistics, business communication addresses the pragmatic dimension of language, often taking an (inter-)cultural perspective (Fuoli 2018). Regarding marketing and PR, corporate communication is often regarded as strategic communication (Zerfass et al. 2018). This contribution will largely focus on content analyses from a corporate communication perspective.

One central *capacity* of corporate communication is supporting to build *intangible resources* that reduce transaction costs for organizations and are key for an organization's long-term competitive advantage (Barney 1991, 2001). These intangible resources include concepts such as knowledge, trust, loyalty, reputation, responsibility, or identity (Cornelissen 2013; Fuoli 2018; Mazzei 2014). One major theme in corporate communication research is the role of corporate communication for explaining stakeholder attitudes and behavior, according to Zerfass and Viertmann's (2017) meta study of research into corporate communication. Beyond the capacity

J. A. Lischka (✉)
Journalistik und Kommunikationswissenschaft, Universität Hamburg, Hamburg, Germany
E-Mail: juliane.lischka@uni-hamburg.de

F. Oehmer-Pedrazzi et al. (Hrsg.), *Standardisierte Inhaltsanalyse in der Kommunikationswissenschaft – Standardized Content Analysis in Communication Research*, https://doi.org/10.1007/978-3-658-36179-2_30

of building intangible resources, corporate communication also enables operations, adjusts strategy, and ensures flexibility of firms (Zerfass and Viertmann 2017). That is, corporate communication supports strategic alignment, market positioning, innovation, or organizational change. These themes can become research topics in content analyses of corporate communication material.

As organizations require monetary and human resources from their environment as well as seek sales markets, organizations also acquire social support, i.e., legitimacy from their environment (Palazzo and Scherer 2006; Suddaby et al. 2017). In this institutional perspective, organizations employ strategic communication to pursue their goals *and* to manage their legitimacy (Suchman 1995). Against this background, corporate social responsibility (CSR) has become a focus in corporate communication research. CSR is often conceptualized as a company's capacity to conform to business, legal, ethical, and philanthropic standards (Carroll 1991, 2016). Operating profitably (business) and obeying the law (legal) comprise rather essential requirements, while to do what is just and fair (ethical) and to be a good citizen (philanthropic) is less obligatory but desired by society (Carroll 1991). Research in CSR studies has focused on perception, impact and promotion; image and reputation; performance; and generally the rhetoric of organizations (Ellerup Nielsen and Thomsen 2018). In CSR research, content analysis is used to assess the performance (Gunawan and Abadi 2017) and the credibility of CSR reports (Lock and Seele 2016), for instance.

Content analyses have gained popularity in corporate communication as well as CSR research since the availability of computer-aided text analysis (CATA) (Duriau et al. 2007; Short et al. 2010), a label used in organizational research. Cornelissen (2013) claims that most research into corporate communication uses surveys, e.g., for stakeholder evaluations of company reputation, while content analyses are often part in case studies alongside interviews and observations. Yet, content analyses are indispensable to identify "who says what," in the terms of Lasswell (1948), and thus represent a classical method for analyzing corporate documents. Content analysis of annual reports "can be of real usefulness for understanding some issues of corporate strategy," argues Bowman (1984, p. 70), because it can not only measure complex organizational constructs, including corporate culture, risk affinity, or CSR. Content analysis can also "show relationships [between constructs] which are otherwise difficult to obtain and which can be tested for validity" (ibid., p. 61). Similarly, Duriau et al. (2007, p. 6) emphasize that content analyses can reliably access "values, intentions, attitudes, and cognitions" that have manifested in corporate messages. Hence, content analyses are used in organizational studies to reveal attitudinal or cognitive aspects of organizations and organizing. In comparison to responsive methods such as surveys or interviews, Harris (2001, p. 195) suggests that content analyses serve as a "reality check" of managerial decision making.

The remainder of the article aims at providing an overview about the diversity of research themes and designs of content analyses in corporate communication.

2 Frequent Research Themes

To describe frequent research themes, I refer to two meta studies: Duriau et al. (2007) and Zerfass and Viertmann (2017). Duriau et al. (2007) conduct a meta study of content analyses in the field of organization studies between 1980 and 2005. Their analysis suggests that research into corporate communication differs regarding studies *of* corporate communication and studies *using* corporate communication material for researching corporate phenomena. They identify two major research themes that most frequently apply content analyses: (a) strategic management issues that address topics such as impression management, corporate reputation, or strategy reformulation and (b) the issue of managerial cognition involving corporate values and culture, sensemaking, blame attribution, or managerial attention in crises (Duriau et al. 2007).

Zerfass and Viertmann (2017, p. 69) analyze publications from the fields of "corporate communication, organizational communication, public relations, marketing, and strategic management," independent from the application of content analyses. They identify twelve central constructs of tangible and intangible outcomes of corporate communication that are studied, i.e., relationships, trust, legitimacy, thought leadership, innovation potential, crisis resilience, reputation, brands, corporate culture, publicity, customer preferences, and employee commitment (Zerfass and Viertmann 2017). Beyond surveying stakeholder groups, for example for assessing corporate reputation (Wartick 2016), some of these concepts can on principle be measured by analyzing the content of corporate communication material and user-generated content.

The following examples provide an impression of the variety of themes studied in corporate communication and may serve as starting point for further investigation into a specific area of interest. Interactivity dimensions of corporate websites are analyzed using content analysis (Ha and James 1998), addressing stakeholder relationships. In crisis communication research, content analysis is conducted to understand which crisis response strategies are used in corporate messages and how news coverage as well as users respond, for instance on social media (Holladay 2010). Combining document analysis and interviews, Huang-Horowitz and Evans (2020) reveal how small companies communicate their organizational identity to gain legitimacy. Regarding leadership, content analyses can reveal the degree of courage expressed by executives and related news coverage (Harris 2001). Li et al. (2018) regard innovation potential as one dimension of corporate culture, along with integrity, quality, respect, and teamwork. They measure corporate culture using a machine learning (ML) approach on a corpus of earnings calls, in which public companies discuss their financial results addressing the investor and analyst communities. The sentiment of user-generated online product reviews indicates customer preferences (Jo and Oh 2011; Tirunillai and Tellis 2014). Concerning employee commitment, Bujaki et al. (2018) reveal impression management strategies of accounting firms addressing diversity-sensitive employees. Regarding internal communication, Darics (2020) analyses instant message conversations between employees and shows that instant messages intend to achieve complex communication goals, including fostering informality and building team identity.

The themes of CSR messages are analysed for various industries in CSR reports (Landrum and Ohsowski 2018) or on social media platforms like Instagram (Kwon and Lee 2021). Moreover, Lock and Seele (2016) quantitatively analyze the credibility of CSR reports by measuring truth of statements, accuracy, completeness, standards used, and sincerity, and reveal that CSR reports can be considered as mediocrely credible. Hoffmann et al. (2018) discursively analyze Facebook's CEO speech revealing it surrounds self-identity, constructs user identity and the relationship between Facebook and its users. As a final example, VanDyke and Tedesco (2016) analyze responsibility frames in green advertising over time, indicating that a habitat protection issue changes into energy efficiency.

3 Frequent Research Designs

Regarding research designs, corporate communication can represent the independent, dependent, or mediating variable. Regarding the *independent* variable, corporate communication messages represent an antecedent to explain attitudinal outcomes (trust and reputation in customers) as well as operational outcomes (e.g., economic results, stock market performance, speed of news product releases) (see Duriau et al. 2007; Zerfass and Viertmann 2017). Here, content analyses are used to evaluate corporate content material—but also content generated by customers or followers. Moreover, research into corporate communication addresses the relation between symbolic communication, which can be assessed with content analyses, and substantive corporate action (Seiffert et al. 2011), often comparing the content of CSR communication and action (Jong and van der Meer 2017; Perez-Batres et al. 2012; Schons and Steinmeier 2016; Wickert et al. 2016). Concerning the *dependent* variable, corporate communication content is regarded as a manifestation of internal processes such as managerial sensemaking or cognition. In this case, content analysis is used to deduce on such internal processes (see Duriau et al. 2007). —One central limitation for the deduction is intentional bias in corporate communication for specific stakeholder groups. For instance, annual reports include a bias toward the positive (Rutherford 2005) or dramatize ideas (Jameson 2000). Methodological responses to this challenge include using multiple data sources and richer databases, triangulation, and sophisticated methods that provide more accurate measurements (Duriau et al. 2007).—Corporate communication messages can also be conceptualized as a *mediating* variable between internal processes and organizational outcomes. For instance, Porcu et al. (2016) regard internal corporate communication as a mediator between corporate culture and operational outcomes, however, use a survey for data collection.

Methodologically, research designs employing content analysis follow qualitative, standardized manual, quantitative-computational approaches, or combinations thereof. Which design to follow depends on the availability of data sources for a research question at hand and the production contexts of the specific material to be analyzed

(Steenkamp and Northcott 2007). For instance, studies into corporate communication addressing journalists as stakeholder group often compare corporate messages and news coverage using quantitative content analysis (e.g., Jonkman et al. 2020; Lischka et al. 2017; Nijkrake et al. 2015). Qualitative approaches aim at revealing organizational narratives, for instance regarding corporate responsibility (Haack et al. 2012), strategy change (Lischka 2019c), and legitimacy (van Leeuwen and Wodak 1999).

According to Duriau et al. (2007), primary *data sources* of corporate communication content analyses are annual reports, followed by proxy statements, trade magazines, publicly available corporate documents, mission statements, internal company documents, and notes from interviews or answers to open-ended survey questions. Moreover, news coverage (e.g., Seiffert et al. 2011; Strycharz et al. 2017), CSR reports (e.g., Lock and Seele 2016), CEO speech (e.g., Beelitz and Merkl-Davies 2012; Hoffmann et al. 2018), social media communication and engagement (e.g., Abitbol and Lee 2017; Choy and Wu 2018; Kim et al. 2014; Macnamara and Zerfass 2012), corporate blogs (e.g., Catalano 2007; Colton and Poploski 2018), advertising (e.g., VanDyke and Tedesco 2016), and text messages (Darics 2020) represent data sources. Researchers from linguistics often build a corpus based on one corporate material genre from multiple organizations, for instance, a corpus of annual reports (Fuoli 2018; Rutherford 2005) or CRS reports (Yu and Bondi 2017). Researchers from other disciplines may also create corpora but without labelling their approach as a corpus approach (e.g., Seiffert et al. 2011).

For computational analyses, researchers have developed dictionaries, for instance, a finance- and accounting-specific dictionary in English (Loughran and McDonald 2011, 2015) and German (Bannier et al. 2019), for environmental sustainability (Deng et al. 2017), and for vagueness in corporate communication (Guo et al. 2017). Also more general dictionaries such as Linguistic Inquiry and Word Count (LIWC) are applied as in Merkl-Davies et al. (2011) and Lee et al. (2020).

4 Trends

There is a variety of methodological trends regarding content analyses of corporate communication. Research combines content analysis with other data collection methods, applies machine learning (ML) and (deep) natural language processing (NLP) techniques, and extends data capacity, contexts, and materiality. The following list provides recent exemplary studies for trends in computational methods, design, sampling, and material, with methods of computational content analysis representing a comparatively large evolving field.

- ML and (deep) NLP
  NLP is a computational method for analyzing naturally occurring human language by building statistical models of language, which has been applied in linguistics (Manning and Schütze 1999). With ML, algorithms are developed that

should improve through training data and can be combined with human coding in supervised or semi-supervised settings. In deep ML, artificial neural networks are used for training (Deng and Liu 2018). Deep NLP can therefore use "both sentence structure and context of the text to provide a deeper understanding of the language" (Lee et al. 2020).
  - Combining human coding and ML (Park et al. 2019),
  - Applying semi-supervised ML (van Zoonen and van der Meer 2016)
  - Applying topic modeling, which is unsupervised as it uses statistical associations of words in a text to generate topics without dictionaries or interpretive rules (Hannigan et al. 2019; Jaworksa and Nanda 2016; Kobayashi et al. 2018; Schmiedel et al. 2018)
  - Specific dictionary development for corporate communication issues (Deng et al. 2017; Guo et al. 2017)
  - Comparing deep NLP (IBM Watson Explorer) with dictionary approaches and human coding to detect the level of charisma in leadership speeches (Lee et al. 2020)
- Triangulation: Combining content analyses with surveys (Dudenhausen et al. 2020), combining qualitative and quantitative approaches (Jaworksa and Nanda 2016)
- Comparative designs: Comparative approaches within Western countries (Köhler and Zerfass 2019; Yu and Bondi 2019; Yuan 2019), and beyond, such as in Asia (Bondi and Yu 2015) and in Americana (Loureiro and Gomes 2016)
- Non-Western context: CSR communication in India (Jain and Moya 2016), in restrictive systems such as China (Zhang et al. 2017) and Russia (Sorokin et al. 2019)
- Visuality: Analyzing visual rhetoric in corporate reports (Goransson and Fagerholm 2018; Greenwood et al. 2018; Ruggiero 2020) and multimodal (textual and visual) content analysis, for instance to account for the multimodality of corporate websites (Höllerer et al. 2019)

5 Research Desiderata

The trend on employing large collections of texts combined with ML, such as applying topic modelling algorithms, requires advances in methodological standards, for instance regarding procedures such as structural topic models (Roberts et al. 2019), validity comparisons across content analysis methods (van Atteveldt et al. 2021), and quality criteria for automated content analyses (Laugwitz 2021). With the ability to analyze extensive data sets, complex research designs may become better attainable. For instance, the various agents and processes that constitute organizational legitimacy as proposed in Bitektine and Haack (2015) may be tackled. In doing so, qualitative approaches, for instance to understand the dynamics of corporate narratives as in Jaworksa and Nanda (2016), can be fruitfully combined with computational analyses.

Regarding research objects, Zerfass and Viertmann (2017) suggest that the capacity of corporate communication should be assessed across various types and sizes of organizations (e.g., start-ups, small-and-medium enterprises, large corporations, non-profit organizations), across stakeholder groups (e.g., customers, employees, investors, and journalists), in various situational contexts (e.g., product launches, crises, and mergers), and industries. While organizations in any industry can become objects of analysis for corporate communication research, scholars in the field of communication and journalism studies may be especially interested in communication of organizations involved in public communication such a media organizations (Bachmann 2016; Lischka 2019b; Siegert and Hangartner 2017) or social media platforms (Gillespie 2010; Iosifidis and Nicoli 2020; Lischka 2019a). Against the background of globally acting organizations having the power, and sometimes the obligation, to assume political roles on a global scale (Scherer and Palazzo 2011), future research should focus on such global corporations to understand how they communicate their political stances and roles. There is additional need for comparative studies and, in particular, analyses of non-Western countries.

Moreover, the interaction of communication by multiple organizations can deliver relevant insights. Suchman (1995, p. 592) argues, orchestrated communication by a group of companies, such as social media platforms and search engines, can become a powerful "collective evangelism" when occupying an issue. From an institutional perspective, analyzing potentially orchestrated communication of globally acting organizations can show how new institutions in societies are negotiated.

Lastly, there has been a normative turn in management research towards the "grand" challenges of global societies, including poverty, good economic growth, health disparities, climate change, and sustainability (United Nations n.d.). Against the background that organizations should build value for societies, management researchers wish to contribute to how organizations can help to address and solve these grand problems (George et al. 2016). Corporate communication researchers, especially those focusing on CSR, are uniquely positioned to addressing grand challenges from a corporate communication perspective. Content analyses using material from companies as well as produced by various stakeholder groups can reveal links between communication and corporate goals as well as societal challenges on a broader scale.

References

Abitbol, A., & Lee, S. Y. (2017). Messages on CSR-dedicated Facebook pages: What works and what doesn't. *Public Relations Review*, *43*(4), 796–808.

Bachmann, P. (2016). *Medienunternehmen und der strategische Umgang mit Media Responsibility und Corporate Social Responsibility* (Dissertation). Springer Fachmedien Wiesbaden GmbH.

Bannier, C., Pauls, T., & Walter, A. (2019). Content analysis of business communication: Introducing a German dictionary. *Journal of Business Economics*, *89*(1), 79–123.

Barney, J. B. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, *17*(1), 99–120.

Barney, J. B. (2001). Resource-based theories of competitive advantage: A ten-year retrospective on the resource-based view. *Journal of Management*, *27*(6), 643–650.

Beelitz, A., & Merkl-Davies, D. M. (2012). Using discourse to restore organisational legitimacy: 'CEO-speak' after an incident in a German nuclear power plant. *Journal of Business Ethics*, *108*(1), 101–120.

Bitektine, A., & Haack, P. (2015). The "macro" and the "micro" of legitimacy: Toward a multilevel theory of the legitimacy process. *Academy of Management Review*, *40*(1), 49–75.

Bondi, M., & Yu, D. (2015). Textual voices in corporate reporting: A cross-cultural analysis of Chinese, Italian, and American CSR reports. *International Journal of Business Communication*, *56*(2), 173–197.

Bowman, E. H. (1984). Content analysis of annual reports for corporate strategy and risk. *Interfaces*, *14*(1), 61–71. Retrieved from www.jstor.org/stable/25060520

Bujaki, M., Durocher, S., Brouard, F., Neilson, L., & Pyper, R. (2018). Protect, profit, profess, promote: Establishing legitimacy through logics of diversity in Canadian accounting firm recruitment documents. *Canadian Journal of Administrative Sciences / Revue Canadienne des Sciences de l'Administration*, *35*(1), 162–178.

Carroll, A. B. (1991). The pyramid of corporate social responsibility: Toward the moral management of organizational stakeholders. *Business Horizons*, *34*(4), 39–48.

Carroll, A. B. (2016). Carroll's pyramid of CSR: Taking another look. *International Journal of Corporate Social Responsibility*, *1*(1), 446.

Catalano, C. S. (2007). Megaphones to the internet and the world: The role of blogs in corporate communications. *International Journal of Strategic Communication*, *1*(4), 247–262.

Choy, C. H. Y., & Wu, F. (2018). Comparative case study: When brands handle online confrontations. *International Journal of Conflict Management*, *29*(5), 640–658.

Colton, D. A., & Poploski, S. P. (2018). A content analysis of corporate blogs to identify communications strategies, objectives and dimensions of credibility. *Journal of Promotion Management*, *25*(4), 609–630.

Cornelissen, J. P. (2013). Corporate communication. *The International Encyclopedia of Communication*. American Cancer Society.

Darics, E. (2020). E-Leadership or "How to be boss in instant messaging? " The role of nonverbal communication. *International Journal of Business Communication*, *57*(1), 3–29.

Deng, L., & Liu, Y. (Eds.) (2018). *Deep learning in natural language processing*. Singapore: Springer Singapore. Retrieved from http://dx.doi.org/https://doi.org/10.1007/978-981-10-5209-5

Deng, Q., Hine, M., Ji, S., & Sur, S. (2017). Building an environmental sustainability dictionary for the IT industry. *Proceedings of the Annual Hawaii International Conference on System Sciences*. Hawaii International Conference on System Sciences.

Dudenhausen, A., Röttger, U., & Czeppel, D. (2020). Do corporations communicate what the general public expects? Investigating the gap between corporate self-image and public perceptions of corporate responsibility. *International Journal of Strategic Communication*, *14*(1), 25–40.

Duriau, V. J., Reger, R. K., & Pfarrer, M. D. (2007). A content analysis of the content analysis literature in organization studies: Research themes, data sources, and methodological refinements. *Organizational Research Methods*, *10*(1), 5–34.

Ellerup Nielsen, A., & Thomsen, C. (2018). Reviewing corporate social responsibility communication: A legitimacy perspective. *Corporate Communications: An International Journal*, *23*(4), 492–511.

Fuoli, M. (2018). Building a trustworthy corporate identity: A corpus-based analysis of stance in annual and corporate social responsibility reports. *Applied Linguistics*, *39*(6), 846–885.

George, G., Howard-Grenville, J., Joshi, A., & Tihanyi, L. (2016). Understanding and tackling societal grand challenges through management research. *Academy of Management Journal*, *59*(6), 1880–1895.

Gillespie, T. (2010). The politics of 'platforms'. *New Media & Society*, *12*(3), 347–364.

Goransson, K., & Fagerholm, A.-S. (2018). Towards visual strategic communications. *Journal of Communication Management*, *22*(1), 46–66.

Greenwood, M., Jack, G., & Haylock, B. (2018). Toward a methodology for analyzing visual rhetoric in corporate reports. *Organizational Research Methods*, *22*(3), 798–827.

Gunawan, J., & Abadi, K. (2017). Content analysis method: a proposed scoring for quantitiative and qualitative disclosures. In D. Crowther & L. M. Lauesen (Eds.), *Handbook of research methods in corporate social responsibility* (pp. 349–363). Cheltenham, UK, Northampton, MA, USA: Edward Elgar Publishing.

Guo, W., Yu, T., & Gimeno, J. (2017). Language and competition: Communication vagueness, interpretation difficulties, and market entry. *Academy of Management Journal*, *60*(6), 2073–2098.

Ha, L., & James, E. L. (1998). Interactivity reexamined: A baseline analysis of early business web sites. *Journal of Broadcasting & Electronic Media*, *42*(4), 457–474.

Haack, P., Schoeneborn, D., & Wickert, C. (2012). Talking the talk, moral entrapment, creeping commitment? Exploring narrative dynamics in corporate responsibility standardization. *Organization Studies*, *33*(5-6), 815–845.

Hannigan, T. R., Haans, R. F. J., Vakili, K., Tchalian, H., Glaser, V. L., Wang, M. S., . . . Jennings, P. D. (2019). Topic modeling in management research: Rendering new theory from textual data. *The Academy of Management Annals*, *13*(2), 586–632.

Harris, H. (2001). Content analysis of secondary data: A study of courage in managerial decision making. *Journal of Business Ethics*, *34*(3/4), 191–208.

Hoffmann, A. L., Proferes, N., & Zimmer, M. (2018). "Making the world more open and connected": Mark Zuckerberg and the discursive construction of Facebook and its users. *New Media & Society*, *20*(1), 199-218.

Holladay, S. J. (2010). Are they practicing what we are preaching? An investigation of crisis communication strategies in the media coverage of chemical accidents. In S. J. Holladay & W. T. Coombs (Eds.), *Handbooks in communication and media. The handbook of crisis communication* (pp. 159–180). Chichester, U.K, Malden, MA: Wiley-Blackwell.

Höllerer, M. A., van Leeuwen, T., & Jancsary, D. (2019). *Visual and multimodal research in organization and management studies*. *Routledge studies in management, organizations and society*.

Huang-Horowitz, N. C., & Evans, S. K. (2020). Communicating organizational identity as part of the legitimation process: A case study of small firms in an Emerging Field. *International Journal of Business Communication*, *57*(3), 327–351.

Iosifidis, P., & Nicoli, N. (2020). The battle to end fake news: A qualitative content analysis of Facebook announcements on how it combats disinformation. *International Communication Gazette*, *82*(1), 60–81.

Jain, R., & Moya, M. de (2016). News media and corporate representation of CSR in India. *International Journal of Strategic Communication*, *11*(1), 61–78.

Jameson, D. A. (2000). Telling the investment story: A narrative analysis of shareholder reports. *Journal of Business Communication*, *37*(1), 7–38.

Jaworksa, S., & Nanda, A. (2016). Doing well by talking good: A topic modelling-assisted discourse study of corporate social responsibility. *Applied Linguistics*, *38*, amw014.

Jo, Y., & Oh, A. H. (2011). Aspect and sentiment unification model for online review analysis. In I. King, W. Nejdl, & H. Li (Eds.), *Proceedings of the fourth ACM international conference on Web search and data mining - WSDM '11* (p. 815). New York, New York, USA: ACM Press.

Jong, M. D. T. de, & van der Meer, M. (2017). How does it fit? Exploring the congruence between organizations and their corporate social responsibility (CSR) activities. *Journal of Business Ethics*, *143*(1), 71–83.

Jonkman, J. G.F., Trilling, D., Verhoeven, P., & Vliegenthart, R. (2020). To pass or not to pass: How corporate characteristics affect corporate visibility and tone in company news coverage. *Journalism Studies*, *21*(1), 1–18.

Kim, S., Kim, S.-Y., & Hoon Sung, K. (2014). Fortune 100 companies' Facebook strategies: Corporate ability versus social responsibility. *Journal of Communication Management*, *18*(4), 343–362.

Kobayashi, V. B., Mol, S. T., Berkers, H. A., Kismihók, G., & Den Hartog, D. N. (2018). Text mining in organizational research. *Organizational Research Methods*, *21*(3), 733–765.

Köhler, K., & Zerfass, A. (2019). Communicating the corporate strategy. *Journal of Communication Management*, *23*(4), 348–374.

Kwon, K., & Lee, J. (2021) Corporate social responsibility advertising in social media: a content analysis of the fashion industry's CSR advertising on Instagram. *Corporate Communications: An International Journal 26*(4) 700–715 https://doi.org/10.1108/CCIJ-01-2021-0016

Landrum, N. E., & Ohsowski, B. (2018). Identifying Worldviews on Corporate Sustainability: a content analysis of corporate sustainability reports. *Business Strategy and the Environment 27*(1), 128–151. https://doi.org/10.1002/bse.1989

Laugwitz, L. (2021). Qualitätskriterien für die automatische Inhaltsanalyse. Zur Integration von Verfahren des maschinellen Lernens in die Kommunikationswissenschaft. https://doi.org/10.31235/osf.io/gt28f

Lasswell, H. D. (1948). The structure and function of communication in society. In L. Bryson (Ed.), *The communication of ideas* (pp. 37–52). New York: Harper.

Lee, L. W., Dabirian, A., McCarthy, I. P., & Kietzmann, J. (2020). Making sense of text: Artificial intelligence-enabled content analysis. *European Journal of Marketing*, *54*(3), 615–644.

Li, K., Mai, F., Shen, R., & Yan, X. (2018). Measuring corporate culture using machine learning. *SSRN Electronic Journal*. Advance online publication.

Lischka, J. A., Stressig, J., & Bünzli, F. (2017). News about newspaper advertisers: To what extent can corporate advertising budgets predict editorial uptake and coverage of corporate press releases? *Journalism*, *18*(10), 1397–1414.

Lischka, J. A. (2019a). A badge of honor? How the New York Times discredits president Trump's fake news accusations. *Journalism Studies*, *20*(2), 287–304.

Lischka, J. A. (2019b). Strategic communication as discursive institutional work: A critical discourse analysis of Mark Zuckerberg's legitimacy talk at the European Parliament. *International Journal of Strategic Communication*, *13*(3), 197–213.

Lischka, J. A. (2019c). Strategic renewal during technology change: Tracking the digital journey of legacy news companies. *Journal of Media Business Studies*, *16*(3), 182–201.

Lock, I., & Seele, P. (2016). The credibility of CSR (corporate social responsibility) reports in Europe. Evidence from a quantitative content analysis in 11 countries. *Journal of Cleaner Production*, *122*, 186–200.

Loughran, T., & McDonald, B. (2011). When is a liability not a liability? Textual analysis, dictionaries, and 10-Ks. *Journal of Finance*, *66*(1), 35–65.

Loughran, T., & McDonald, B. (2015). The use of word lists in textual analysis. *Journal of Behavioral Finance*, *16*(1), 1–11.

Loureiro, S. M. C., & Gomes, D. G. (2016). Relationship between companies and the public on Facebook: The Portuguese and the Brazilian context. *Journal of Promotion Management*, *22*(5), 705–718.

Macnamara, J., & Zerfass, A. (2012). Social media communication in organizations: The challenges of balancing openness, strategy, and management. *International Journal of Strategic Communication*, *6*(4), 287–308.

Manning, C. D., & Schütze, H. (1999). *Foundations of statistical natural language processing*. Cambridge, Mass.: MIT Press.

Mazzei, A. (2014). A multidisciplinary approach for a new understanding of corporate communication. *Corporate Communications: An International Journal*, *19*(2), 216–230.

Merkl-Davies, D. M., Brennan, N. M., & McLeay, S. J. (2011). Impression management and retrospective sense-making in corporate narratives. *Acc Auditing Accountability J*, *24*(3), 315–344.

Nijkrake, J., Gosselt, J. F., & Gutteling, J. M. (2015). Competing frames and tone in corporate communication versus media coverage during a crisis. *Public Relations Review*, *41*(1), 80–88.

Palazzo, G., & Scherer, A. G. (2006). Corporate legitimacy as deliberation: A communicative framework. *Journal of Business Ethics*, *66*(1), 71–88.

Park, Y. E., Son, H., Yang, S.-U., & Lee, J. K. (2019). A good company gone bad. *Journal of Communication Management*, *23*(1), 31–51.

Perez-Batres, L., Doh, J., van Miller, & Pisani, M. (2012). Stakeholder pressures as determinants of CSR strategic choice: Why do firms choose symbolic versus substantive self-regulatory codes of conduct? *Journal of Business Ethics*, *110*(2), 157–172.

Porcu, L., del Barrio-García, S., Alcántara-Pilar, J. M., & Crespo-Almendros, E. (2016). The mediating role of integrated corporate communication on the relationship between organizational culture and market performance. In L. Petruzzellis & R. S. Winer (Eds.), *Developments in Marketing Science: Proceedings of the Academy of Marketing Science. Rediscovering the Essentiality of Marketing* (pp. 433–438). Cham: Springer International Publishing.

Roberts, M. E., Stewart, B. M., & Tingley, D. (2019). stm: An R package for structural topic models. *Journal of Statistical Software*, *91*(2).

Ruggiero, P. (2020). No longer only numbers: An exploratory analysis of the visual turn in reporting of public sector organisations. In F. Manes-Rossi & R. Levy Orelli (Eds.), *New Trends in Public Sector Reporting: Integrated Reporting and Beyond* (pp. 105–127). Cham: Springer International Publishing.

Rutherford, B. A. (2005). Genre analysis of corporate annual report narratives: A corpus linguistics-based approach. *Journal of Business Communication*, *42*(4), 349–378.

Scherer, A. G., & Palazzo, G. (2011). The new political role of business in a globalized world: A review of a new perspective on CSR and its implications for the firm, governance, and democracy. *Journal of Management Studies*, *48*(4), 899–931.

Schmiedel, T., Müller, O., & Vom Brocke, J. (2018). Topic modeling as a strategy of inquiry in organizational research: A tutorial with an application example on organizational culture. *Organizational Research Methods*, *22*(4), 941–968.

Schons, L., & Steinmeier, M. (2016). Walk the talk? How symbolic and substantive CSR actions affect firm performance depending on stakeholder proximity. *Corporate Social Responsibility and Environmental Management*, *23*(6), 358–372.

Seiffert, J., Bentele, G., & Mende, L. (2011). An explorative study on discrepancies in communication and action of German companies. *Journal of Communication Management*, *15*(4), 349–367.

Short, J. C., Broberg, J. C., Cogliser, C. C., & Brigham, K. H. (2010). Construct validation using computer-aided text analysis (CATA). *Organizational Research Methods*, *13*(2), 320–347.

Siegert, G., & Hangartner, S. (2017). Media branding: A strategy to align values to media management? In K.-D. Altmeppen, C. A. Hollifield, & J. van Loon (Eds.), *Value-oriented media management: Decision making between profit and responsibility*. Berlin: Springer International.

Sorokin, G. G., Rybakova, A. I., & Popova, I. N. (2019). Print mass media as a government tool in strategic communications: A study based on content analysis of publications in Russia. *Media Watch*, *10*(1).

Steenkamp, N., & Northcott, D. (2007). Content analysis in accounting research: The practical challenges. *Australian Accounting Review*, *17*(43), 12–25.

Strycharz, J., Strauss, N., & Trilling, D. (2017). The role of media coverage in explaining stock market fluctuations: Insights for strategic financial communication. *International Journal of Strategic Communication*, *12*(1), 67–85.

Suchman, M. C. (1995). Managing legitimacy: Strategic and institutional approaches. *Academy of Management Review*, *20*(3), 571–610.

Suddaby, R., Bitektine, A., & Haack, P. (2017). Legitimacy. *The Academy of Management Annals*, *11*(1), 451–478.

Tirunillai, S., & Tellis, G. J. (2014). Mining marketing meaning from online chatter: Strategic brand analysis of big data using latent dirichlet allocation. *Journal of Marketing Research*, *51*(4), 463–479.

United Nations (n.d.). Sustainable development goals: 17 goals to transform our world. Retrieved from https://www.un.org/sustainabledevelopment/

van Atteveldt, W., van der Velden, M. A. C. G., & Boukes, M. (2021). The validity of sentiment analysis: comparing manual annotation, crowd-coding, dictionary approaches, and machine learning algorithms. *Communication Methods and Measures 15*(2), 121–140. https://doi.org/10.1080/19312458.2020.1869198

van Leeuwen, T., & Wodak, R. (1999). Legitimizing immigration control: A discourse-historical analysis. *Discourse Studies*, *1*(1), 83–118.

van Zoonen, W., & van der Meer, T. G.L.A. (2016). Social media research: The application of supervised machine learning in organizational communication research. *Computers in Human Behavior*, *63*, 132–141.

VanDyke, M. S., & Tedesco, J. C. (2016). Understanding green content strategies: An analysis of environmental advertising frames from 1990 to 2010. *International Journal of Strategic Communication*, *10*(1), 36–50.

Wartick, S. L. (2016). Measuring corporate reputation. *Business & Society*, *41*(4), 371–392.

Wickert, C., Scherer, A. G., & Spence, L. J. (2016). Walking and talking corporate social responsibility: Implications of firm size and organizational cost. *Journal of Management Studies*, *53*(7), 1169–1196.

Yu, D., & Bondi, M. (2017). The generic structure of CSR reports in Italian, Chinese, and English: A corpus-based analysis. *IEEE Transactions on Professional Communication*, *60*(3), 273–291.

Yu, D., & Bondi, M. (2019). A genre-based analysis of forward-looking statements in corporate social responsibility reports. *Written Communication*, *36*(3), 379–409.

Yuan, S. (2019). Comparative analysis of Chinese and Japanese corporate communication on facebook and twitter. *Chinese Journal of Communication*, *12*(2), 224–243.

Zerfass, A., Verčič, D., Nothhaft, H., & Werder, K. P. (2018). Strategic communication: Defining the field and its contribution to research and practice. *International Journal of Strategic Communication*, *12*(4), 487–505.

Zerfass, A., & Viertmann, C. (2017). Creating business value through corporate communication. *Journal of Communication Management*, *21*(1), 68–81.

Zhang, T., Khalitova, L., Myslik, B., Mohr, T. L., Kim, J. Y., & Kiousis, S. (2017). Comparing Chinese state-sponsored media's agenda-building influence on Taiwan and Singapore media during the 2014 Hong Kong Protest. *Chinese Journal of Communication*, *11*(1), 66–87.

Prof. Dr. Juliane A. Lischka is Professor of Journalism and Mass Communication, especially Digital Journalism at Universität Hamburg, Germany. Previously, she was a Senior Research and Teaching Associate at the Department of Communication and Media Research, University of Zurich (CH). She holds a PhD in Communication Science from the University of Zurich. Her research focuses on strategic communication and digital journalism.



Die Inhaltsanalyse im Forschungsfeld der kommerziellen Werbung

Katharina Sommer

1 Einleitung

Werbung ist ein wichtiger Bestandteil sämtlicher Medieninhalte – trägt sie doch maßgeblich zur Finanzierung der Medien bei und ist somit ein bedeutender medienökonomischer Faktor (Siegert 2015; Zurstiege 2006). Was genau unter Werbung verstanden wird, ändert sich jedoch mit dem gesellschaftlichen, medialen und wirtschaftlichen Umfeld (Siegert und Brecheis 2005). Unterschiedlichen Definitionen gemein ist, dass unter Werbung bezahlte Mitteilungen verstanden werden, die, vermittelt über ein Medium, an eine Zielgruppe adressiert werden, um Wissen, Einstellungen und Verhaltensweisen der Empfänger dieser Mitteilungen zu beeinflussen (Richards und Curran 2002). Diese Definition schließt sowohl kommerzielle als auch prosoziale Werbung ein. Während prosoziale Werbung die Verbreitung (gesellschaftlich) funktionaler Mitteilungen wie beispielsweise den Hinweis auf die Gefahren des Rauchens meint und der Erfolg anhand von Sozialindikatoren wie im Falle des Rauchens der steigenden Zahl an Nichtrauchern gemessen werden kann, wird kommerzielle Werbung von Unternehmen oder Organisationen zum Ziel der Steigerung ökonomischer Ziele eingesetzt, die über Kennzahlen wie etwa Marktanteile und Absatzzahlen gemessen werden können (Weber und Fahr 2013; Mayer und Illmann 2000). Trotz ihrer existentiellen Bedeutung für die Medien wird insbesondere die kommerzielle Werbung als Forschungsgegenstand in der Disziplin der Medien- und Kommunikationswissenschaft immer noch verhältnismäßig

K. Sommer (✉)
Zurich University of Applied Sciences ZHAW, Winterthur, Schweiz
E-Mail: katharina.sommer-vonschoenberg@zhaw.ch

F. Oehmer-Pedrazzi et al. (Hrsg.), *Standardisierte Inhaltsanalyse in der Kommunikationswissenschaft – Standardized Content Analysis in Communication Research*, https://doi.org/10.1007/978-3-658-36179-2_31

wenig berücksichtigt, während sie in der betriebswirtschaftlichen Forschung seit jeher einen festen und bedeutenden Platz einnimmt (Kim et al. 2014; Siegert und Brecheis 2005).

Der inhaltliche Fokus in der Forschung liegt insgesamt stark auf der Wirkung von Werbeinhalten, Studien zum Inhalt der Werbung und somit mit der Methode der Inhaltsanalyse sind dagegen unterrepräsentiert (Kim et al. 2014). Bei der Wahl des Mediums als Werbeträger konzentrieren sich die inhaltsanalytischen Studien insbesondere auf Werbung in Printmedien und im Fernsehen, wobei seit 2000 auch verstärkt Werbung im Internet berücksichtigt wird (Kim et al. 2014).

Kombiniert werden Inhaltsanalysen von Werbeinhalten selten mit weiteren Methoden. Die Ergebnisse werden zwar vor dem Hintergrund von Wirkungsannahmen diskutiert und eingeordnet, allerdings kommt eine tatsächliche Wirkungsanalyse der analysierten Medieninhalte so gut wie nicht vor. Ausnahme bildet eine schon weit zurückliegende Studie zur Wirkung von Eigenschaften von Fernsehwerbung wie beispielsweise Informationsgehalt, Humor, (audio)visuelle und sprachliche Gestaltung auf Erinnerung und Gefallen (Stewart und Furse 1986). Die Autoren kombinierten eine Inhaltsanalyse von rund 1000 Fernsehwerbungen mit Befragungen von 300 bis 400 Befragten pro Werbung. Die Befragten nahmen Teil an einer Werbeclip-Teststudie, in der sie eine halbe Stunde ein Fernsehprogramm sahen, in das elf Werbungen zufällig eingepflegt waren. Eine aktuellere Studie kombiniert eine Inhaltsanalyse von Werbeanzeigen in Zeitschriften zur Bezugnahme auf Kunst(Stile) mit einer Bevölkerungsbefragung und einer Befragung von Menschen, die beruflich kreativ arbeiten (Hetsroni 2005; Hetsroni und Tukachinsky 2005). Allerdings nehmen die Autoren nur jeweils Bezug auf Inhaltsanalyse und Befragungen, indem aufgezeigt wird, dass der vorherrschende Bezug auf den Stil der Klassik in der Werbung mit der dominanten Präferenz für diesen Stil in der Bevölkerung und mit der Einschätzung der Angemessenheit dieses Stils für die Werbung durch Menschen mit kreativem Beruf einhergeht. Es findet also keine tatsächliche Kombination der Daten innerhalb einer Analyse statt.

Ebenso selten ist die Kombination von Inhaltsanalysen mit Experimentalstudien. Auch hier kann von einer „assoziativen" Kombination gesprochen werden, da die erhobenen Daten nicht direkt miteinander in Beziehung gesetzt werden, sondern die Befunde aus der Inhaltsanalyse die Entwicklung oder Auswahl der Stimuli für das Experiment beeinflussen. So gestalten Eisend et al. (2014) beispielsweise auf der Basis inhaltsanalytischer Befunde zum Vorkommen von Genderstereotypen und Humor in der Werbung vier Stimuli für das darauffolgende Experiment zur Wirkung dieser Werbecharakteristika auf die Rezipienten. Eine weitere Studie untersucht inhaltsanalytisch Lebensmittelwerbung innerhalb des Kinderfernsehprogamms und wählt aus den analysierten Werbeclips zehn möglichst typische Stimuli für das Experiment zur Wirkung der Clips auf die Körperwahrnehmung der jungen RezipientInnen aus (Lewis und Hill 1998). Brader (2006) kombiniert seine inhaltsanalytische Untersuchung zum emotionalen Ton von politischer TV-Werbung mit einer Reihe von Experimenten zur Wirkung von emotionalen Elementen in der Werbung. Auch er verbindet die Befunde seiner Untersuchungen nur argumentativ.

2 Besonderheiten von Werbung als Untersuchungsgegenstand der Inhaltsanalyse

Werbeinhalte treffen in der Regel auf RezipientInnen, die nicht bewusst nach diesen Inhalten gesucht haben und der Werbung dementsprechend geringe Aufmerksamkeit entgegenbringen. Das heißt, dass Werbung durch gestalterische Mittel möglichst viel Aufmerksam- und Einprägsamkeit zu generieren versucht, um eine Wirkung auf die Erinnerung und eine Persuasionswirkung entfalten zu können (Weber und Fahr 2013). Bewegte und statische Bilder und das Zusammenspiel von Bild- und Textbotschaften sind daher in der Werbung zentral (Mitchell 1986), stellen für die standardisierte Inhaltsanalyse allerdings auch eine Herausforderung dar (Parry 2018; Bock et al. 2011). So können Codebücher, die für die Analyse von verbalen Werbeelementen entwickelt wurden, nicht ohne weiteres auf Bilder angewendet werden, da die fehlende Syntax und noch ausgeprägtere Polysemie eine reliable Codierung als eindeutige Zuweisung von Codes zu unterschiedlichen visuellen Elementen innerhalb eines Bilds deutlich erschwert (Scott 1994; Parry 2018).

3 Trends, Konstrukte und zentrale Befunde in der Forschung

Den inhaltsanalytischen Studien zu kommerzieller Werbung liegt, wie schon erwähnt, mehr oder weniger explizit eine Wirkungsannahme zugrunde, die für die Auswahl und Definition der analysierten Konstrukte und Variablen in den Inhaltsanalysen zentral ist, auch, wenn keine Wirkungsanalyse durchgeführt wird, sondern rein deskriptiv die Inhalte der Werbung ausgewertet werden. Wie im Folgenden deutlich werden wird, befassen sich zahlreiche Studien mit den Inhalten von Werbung, die an Kinder oder Heranwachsende als zentrale Zielgruppe gerichtet ist, und dabei dominiert die Frage nach möglichen (negativen) Folgen. Insgesamt lassen sich sechs zentrale Fragen formulieren, die in den Inhaltsanalysen kommerzieller Werbeinhalte leitend sind.

1. Welche Produkte oder Produktklassen werden beworben?

Die Produkte oder Produktklassen werden in zahlreichen Inhaltsanalysen von Werbeinhalten mit erhoben, ohne dann zentral in der Auswertung berücksichtigt zu werden. Sie bilden häufig also die Basis für die weitere Codierung. Sofern inhaltlich bei der Darstellung der Ergebnisse auf die Produktklassen eingegangen wird, lassen sich vor allem zwei Ausrichtungen in den Forschungsfragen ausmachen: Zum einen besteht die Vermutung, dass Medienangebote für bestimmte Zielgruppen mit Werbung kombiniert werden, die für diese Zielgruppen dysfunktionale Auswirkungen haben könnte. So wird beispielsweise untersucht, welche Lebensmittelprodukte im TV-Kinderprogramm beworben werden (Lewis und Hill 1998). Hier zeigte sich, dass Werbung für Süßigkeiten, Fast Food oder für vorverarbeitete Essensprodukte als häufigste Nahrungsmittelkategorien auftreten. Bei einer Analyse der Werbeinhalte im Prime-Time Fernsehangebot in

Großbritannien zeigte sich, dass (gesellschaftlich als dysfunktional gewertete) Alkoholwerbung in 50 % der Programme vor neun Uhr integriert war (Barker et al. 2019). Zum anderen wird untersucht, inwiefern bestimmte Produkte oder Produktklassen mit weiteren Gestaltungseigenschaften kombiniert werden. So wird etwa untersucht, inwiefern gängige Produktgruppen bzw. Branchen mit dem Thema Nachhaltigkeit beworben werden (Carlson et al. 1993), inwiefern Produkte mit hohem oder mit niedrigem Prestige mit Kunstzitationen beworben werden (Hetsroni 2005; Hetsroni und Tukachinsky 2005) oder wie viele Informationen Werbung für immaterielle Güter (wie Dienstleistungen) im Vergleich zu materiellen Gütern enthalten (Mortimer 2000; Pickett et al. 2001) und inwiefern der Grad an Produktähnlichkeit zu Produkten von anderen Anbietern („Product Parity") den Informationsgehalt in der Werbung beeinflusst (Pickett et al. 2001). Die Ergebnisse der genannten Studien sind beispielhaft als Einzelergebnisse und nicht als durch kumulative Studien gesicherte Erkenntnisse zu verstehen. Nichtsdestotrotz zeigen sie, dass (naheliegend) insbesondere Produkte aus dem Energiesektor oder mit Verbindung zum Wald mit Nachhaltigkeit beworben werden, aber auch die Haushalts- oder Büroprodukte mit nachhaltigen Claims verknüpft werden, Produkte mit einem geringen Grad an Produktähnlichkeit (und damit einem höheren Grad an Unterscheidbarkeit über Produkteigenschaften) mehr Informationen enthalten und insbesondere Werbung für Produkte mit hohem Prestige auf klassische Kunst verweist.

2. Wie hoch ist die visuelle Komplexität der Werbung?

Auch die Komplexität der visuellen Aufbereitung findet in einigen Inhaltsanalysen von Werbung Berücksichtigung (Huhmann 2003; Alvy und Calvert 2008; Weber et al. 2006). Die Komplexität kann über den Detailreichtum und die Variation von unterschiedlichen Farben und Formen (Pieters et al. 2010), aber auch über komplexere Inhalte wie Bewegungselemente und Animationen, das Verhältnis von Text und Bild und sprachliche und bildliche Stilmittel wie beispielsweise Metaphern (Jeong 2008; Phillips und McCarrie 2004) erhöht werden. Leitend ist die Frage danach, wie komplex die Werbetreibenden die Werbung gestalten, um möglichst große Aufmerksamkeit bei den Rezipienten zu erregen. Theoretisch leitend (wenn auch nicht inhaltsanalytisch zu beantworten) ist auch die Frage danach, wie viel Komplexität von den Rezipienten verarbeitbar ist, so dass sie sich positiv auf den Werbeerfolg auswirken kann (Berlyne 1958; Pieters et al. 2010). Die Studien haben auch hier Fallstudiencharakter. So zeigte beispielsweise die Analyse von Online-Bannerwerbung, dass Farbfotografien als bildliche Elemente dominieren und dass ein moderates Level an Komplexität, zum Beispiel ein animiertes Bild, in gut der Hälfte der untersuchten Banner und damit am häufigsten vorkommt, während eine hohe Komplexität (ein Bild mit visuellen als auch textlichen Animationen) deutlich seltener vorzufinden ist (Huhmann 2003). In Lebensmittelwerbung für Kinder im Internet zeigte sich eine Dominanz von visuell aufwendigen Elementen wie Animationen, fetter und farbiger Schrift und dynamischen Bildern, um die Aufmerksamkeit der Kinder auf die Werbeinhalte der Websites zu lenken (Alvy und Calvert 2008; Weber et al. 2006).

3. Wie häufig werden alternative Werbeformen angewandt?
Neben der Frage nach der visuellen Aufbereitung der Werbeinhalte wird auch untersucht, wie häufig auf alternative Formen der Werbung gesetzt wird. Neben „klassischen" Werbeanzeigen in Printformaten und Werbeclips in Radio und Fernsehen stehen dabei vor allem Formen wie Advergames im Fokus der Inhaltsanalysen. Bei Advergames handelt es sich um eine Werbeform, bei der ein Spiel mit der Bewerbung eines Produkts kombiniert wird (Alvy und Calvert 2008; Brady et al. 2010). Insbesondere wurde untersucht, inwiefern Advergames als Werbeform in Kinderwerbung für Lebensmittel eingesetzt werden. Ergebnisse zeigen, dass Advergames als alternative Werbeformen zwar deutlich seltener als herkömmliche Werbeanzeigen gewählt werden, aber neben Produktplatzierungen als häufigste alternative Werbeform vorkommt (Alvy und Calvert 2008). Auf Internetseiten für Kinder von Lebensmittelherstellern waren Advergames sogar ein zentraler Bestandteil (Brady et al. 2010; Weber et al. 2006). Neben Studien, die sich auf die Frage konzentrieren, wie häufig Advergames vorkommen, gehen einige wenige Studien auch auf die Inhalte der Werbespiele ein (Lee et al. 2009; Culp et al. 2010). Insbesondere Süßigkeiten werden in den Advergames als Produkte beworben bzw. in das Spiel integriert, und die Spiele enthalten einen verschwindend geringen Anteil bildender und aufklärender Elemente. Eine weitere Werbeform, die in Inhaltsanalysen eine (wenn auch geringe) Berücksichtigung findet, ist das sogenannte „Native Advertising" (Wojdynski und Golan 2016), bei dem sich die Werbenden der Glaubwürdigkeit des Mediums bedienen, indem die Werbeinhalte im Stil der redaktionellen Medieninhalte präsentiert werden. Sie müssen allerdings eindeutig als Werbung gekennzeichnet sein. Advertorials, also Werbebeiträge in Printmedien, die im Layout des journalistischen Inhalts präsentiert werden, wurden schon vor der Zeit digitaler Inhalte inhaltsanalytisch untersucht (Cameron et al. 1996). Die Frage danach, ob, und falls ja, wie sichtbar die Advertorials als nicht redaktionelle Werbeinhalte gekennzeichnet werden, war hierin leitend. Es zeigte sich, dass eine klare Kennzeichnung bei bis zu einem Drittel der Advertorials gänzlich fehlte. Fand eine Kennzeichnung statt, so ist sie sehr häufig deutlich kleiner und wenig prominent platziert (Cameron et al. 1996). Aktuelle Forschung beschäftigt sich vor allem mit dem Vorkommen von Native Advertising in sozialen Medien (Hanson 2018). Die Ergebnisse haben auch in diesem Fall wieder Fallstudiencharakter, deuten allerdings darauf hin, dass diese Werbeform stark in sozialen Medien eingesetzt wird. Ein inhaltsanalytisch stärker beachtetes Werbemittel ist das Product und Brand Placement, bei dem Produkte und Marken innerhalb des Medieninhalts gegen Bezahlung platziert werden, und zwar insbesondere in Film, Fernsehen und Musik(videos) (Burkhalter und Thornton 2014; Chan und Fong 2016; La Ferle und Edwards 2006; Naderer et al. 2019). Auch hier zeigte sich eine starke Präsenz dieser Werbeform, und zwar auch in Medieninhalten, die sich speziell an Kinder und Jugendliche richten (Burkhalter und Thornton 2014; Naderer et al. 2019). Trotz des immens wachsenden Anteils des Werbebudgets von Unternehmen, der an Suchmaschinen und soziale Medien fliesst (Croteau und Hoynes 2019), wird Werbung in Suchmaschinen sozialen Medien äusserst selten inhaltsanalytisch untersucht. Während einige wenige

Studien den Inhalt der offiziellen Präsentationen von Unternehmen in sozialen Medien untersuchen (Parsons 2013; Tyrawski und DeAndrea 2015) oder analysiert wird, welche Formen von Werbung in Apps speziell für Kinder im Vorschulalter vorkommen (Meyer et al. 2019), wird insbesondere personalisierte Werbung bisher inhaltsanalytisch noch nicht in den Blick genommen.

4. Wie hoch ist der Informationsgehalt in der Werbung und welche Arten von Informationen werden integriert?

Neben der Analyse der gestalterischen Aufbereitung findet der Informationsgehalt der Werbung inhaltsanalytisch größere Beachtung. Dabei werden unterschiedliche Informationselemente wie beispielsweise Informationen zum Preis und zu Garantiebedingungen, zur Verfügbarkeit, zur Performance oder zu Eigenschaften des Produkts erfasst (Abernethy und Franke 1996; Resnik und Stern 1977; Mortimer 2000; Picket et al. 2001; Rice und Lu 1988). Bei dieser Art von Informationen handelt es sich also um Argumente bezüglich der Beschaffenheit des Produkts. Die Frage nach der Menge an Informationen wird in den Studien häufig kombiniert mit Vergleichen, wie beispielsweise zwischen Ländern (Rice und Lu 1988) oder zwischen Produktarten (Picket et al. 2001; Mortimer 2000). Insgesamt zeigt sich, dass die überwiegende Anzahl der Werbung mindestens eine produktbezogene Information enthält und dabei insbesondere Informationen zu Verfügbarkeit, Performance und den Eigenschaften des Produkts integriert werden. Informationen zu Preis und Qualität werden relativ dazu seltener genannt (Abernethy und Franke 1996; Mortimer 2000). Neben diesen „klassischen" Produkteigenschaften gibt es noch eine weitere Form der Information, die in der neueren Forschung an Bedeutung gewinnt, und zwar Informationen zu (vornehmlich ökologischer) Nachhaltigkeit in der kommerziellen Werbung. Studien untersuchen, welche Art von Informationen zur Nachhaltigkeit des Produkts, der Marke oder des Unternehmens gegeben werden (Banerjee et al. 1995), ob es sich um Fakten oder um eher vage Angaben handelt und auch, inwiefern es sich um korrekte Informationen oder sogar um Falschinformationen handelt (Carlson et al. 1993; Segev et al. 2016). Ergebnisse zeigen, dass Werbung mit nachhaltigen Inhalten deutlich zugenommen hat und insbesondere das Produkt als nachhaltig dargestellt oder ein „grünes" Image vermarktet wird und dass auch vage oder sogar falsche Darstellungen durchaus häufiger vorkommen (Carlson et al. 1993; Segev et al. 2016).

5. Welche affektiven Elemente wie Emotionen, Werte und Humor werden in der Werbung eingesetzt?

Neben der Berücksichtigung von (rationalen) Informationen beschäftigt sich die Forschung auch mit emotionalen Appellen in der Werbung, die die Kaufmotivation für das Produkt anregen sollen. So wird beispielsweise untersucht, wie häufig Appelle in der Werbung vorkommen, die entweder ein emotionales Erleben wie beispielsweise Spaß und Entspannung oder ein Gefühl des „Aufgehobenseins" ansprechen,

oder Werte, wie beispielsweise Tradition und Familiensinn, aber auch Freiheit, aufgreifen und somit emotional aufgeladen sind (Albers-Miller und Stafford 1999; Johnson Shen et al. 2017; Lewis und Hill 1998). Explizit mit kulturellen Werten in Werbung beschäftigen sich verhältnismäßig viele Inhaltsanalysen, wobei die Überschneidung mit den emotionalen Appellen stark ist. So werden Moral und Verantwortung, aber auch Schönheit oder ein spannendes und angenehmes Leben als Werte eingeschlossen (Pollay 1983; Cheng 1994; Tse et al. 1989). Insgesamt bedeuten diese affektiven Appelle, dass der Konsumentin und dem Konsumenten affektive Gratifikationen durch die Nutzung des Produkts in Aussicht gestellt werden. Die Studien zeigen, dass emotionale Appelle eine zentrale Rolle in der Werbung spielen und es in der Häufigkeit des Einsatzes von Werten deutliche Unterschiede zwischen unterschiedlichen Ländern und Kulturen gibt. Auch Humor als Stilmittel in Werbebotschaften lässt sich als affektiver Appell verstehen und wird in zahlreichen Studien untersucht. Neben der Frage, wie häufig Humor in der Werbung vorkommt (Alden et al. 1993; Kelly und Solomon 1975; McCullough und Taylor 1993; Toncar 2001; Weinberger und Campbell 1991; Weinberger und Spotts 1989), werden auch spezifischere Fragen untersucht, beispielsweise, inwiefern Humor mit Falschinformationen (Shabbir und Thwaites 2007), mit Aggression (Scharrer et al. 2006) oder mit Gender-Stereotypen (Eisend et al. 2014; Furnham & Spencer-Bowdage) kombiniert wird. Bei der Codierung von Humor dominiert die einfache Unterscheidung, ob Humor oder eine Humorintention in der Werbung vorhanden ist oder nicht. Teilweise werden unterschiedliche Arten von Humor codiert, wie beispielsweise, wie stark der Überraschungseffekt dominiert und der Inhalt vorhersehbar ist (Alden et al. 1993) oder wie stark der Humor in der Situation begründet liegt und nicht etwa in einer Herabsetzung einer Person oder einer verbalen Äußerung einer Person (Furnham und Spencer-Bowdage 2002). Es zeigt sich insgesamt, dass Werbung mit humorvollen Komponenten häufig vorkommt (zwischen 25 und 35 % der Werbung enthält Humor bzw. Humorintentionen) und dass Humor, der überraschend ist und sich aus der Situation heraus ergibt, dabei zu dominieren scheint.

6. Welche Rolle nehmen Gender-Stereotype und Erotik in der Darstellung von sozialen Gruppen und Personen in der Werbung ein?

Personen sind in der Werbung allgegenwärtig. Da jede Person unterschiedlichen sozialen Gruppen zuzuordnen ist, sind Stereotype als Assoziationen und Vorstellungen über die Charakteristika und Attribute von Mitgliedern einer Gruppe (Dovidio et al. 2010) auch in Werbeinhalten vorzufinden. Da die Genderdifferenzierung anhand von stereotypen Attributzuweisungen schon im Vorschulalter zu beobachten ist (Gelman et al. 1986) und die Unterscheidung zwischen Männern und Frauen bei jeder Personendarstellung potentiell stattfinden kann, sind Gender-Stereotype auch in der Werbung zentral, zumal gerade in Werbeinhalten aufgrund der Kürze der Darstellung (oftmals nur innerhalb eines Bildes) eine Person nicht für sich, sondern als VertreterIn einer sozialen Gruppe präsentiert wird. Die Forschung zu Gender-Stereotypen in der Werbung ist umfangreich, so fand eine Metaanalyse über 80 Inhaltsanalysen aus den Jahren 1975 bis 2007,

die sich mit Geschlechterrollen in der Werbung beschäftigten (Eisend 2010), und auch in der aktuellen Forschung sind zahlreiche weitere inhaltsanalytische Studien zu Gender-Stereotypen zu finden (Grau und Zotos 2016). Darin wird untersucht, inwieweit Frauen in traditionellen Rollenbildern als fürsorgliche (Haus)Frau und Mutter, dem Mann untergeordnet und wenig unabhängig dargestellt werden (Furnham und Mak 1999; Furnham und Paltzer 2010; Knoll et al. 2011). Studien zeigen deutlich, dass Gender-Stereotypisierung in der Werbung weit verbreitet ist. Stereotypisierung tritt hauptsächlich im Zusammenhang mit dem beruflichen Status der Geschlechter auf. Zwar kommen Gender-Stereotype in der Werbung im Laufe der Jahre weniger häufig vor, allerdings ist dieser Rückgang vornehmlich in Ländern zu beobachten, die insgesamt eine Gleichstellungspolitik verfolgen (Eisend 2010; Grau und Zotos 2016). Ein weiterer starker Fokus in der Analyse von Personendarstellungen in der Werbung liegt auf der Verwendung von sexualisierten Darstellungen oder Erotik in der Präsentation von Personen. So wird untersucht, inwiefern (vor allem visuelle) Elemente wie nackte Haut oder sexuelles Verhalten und sexualisierte oder feminine Gesten eingesetzt werden (Döring und Pöschl 2006; Huang und Lowry 2012; Nelson und Paek 2008; Reichert 2002; Reichert und Carpenter 2004; Reichert et al. 2012; Reichert und Ramirez 2000). Insgesamt weisen die Ergebnisse darauf hin, dass insbesondere Frauen sexualisiert in der Werbung dargestellt werden und dieser Trend über die Jahre zugenommen hat, wobei die Darstellungen zusätzlich expliziter werden.

4 Forschungsdesiderata

Die dargestellten Ergebnisse zeigen, dass Werbeinhalte in Inhaltsanalysen sehr breit mit ganz unterschiedlichen Forschungsinteressen berücksichtigt werden. Trotz der Fülle an Studien fehlen allerdings weitestgehend Übersichtsbeiträge und Metaanalysen, die die unterschiedlichen Einzelbefunde in Beziehung zueinander stellen. Die Verbindung und Aufarbeitung des Forschungsstands erscheint allerdings unerlässlich, um die Einzelbefunde zu einem Gesamtbild zusammenzubringen und so als Basis weiterer Forschung auch in Kombination mit anderen Datenerhebungsmethoden fruchtbar zu machen. Die Wirkung von Werbeinhalten wird, wie eingangs dargestellt, am stärksten untersucht. Dabei fällt auf, dass zu vielen Werbeinhalten zwar die Wirkung theoretisch modelliert und empirisch meist experimentell untersucht wird, allerdings inhaltsanalytisch noch gar nicht festgestellt wurde, wie häufig das jeweilige Phänomen überhaupt in der Werbung vorliegt. So werden recht basale formale Elemente außerhalb des Konstrukts der visuellen Komplexität inhaltsanalytisch nur selten berücksichtigt, während es im Bereich der Forschung zur Wirkung von Werbung einige Studien beispielsweise zum Einfluss von Farbgebung, Typographie und Wirkung von Metaphern (Jeong 2008; Phillips und McCarrie 2004) auf den Werbeerfolg gibt. Es wäre also erstens wünschenswert, wenn inhaltsanalytisch zu zentralen Konstrukten der Wirkungsforschung ermittelt werden

könnte, wie groß das Wirkungspotential allein durch die Verbreitung des Phänomens ausfallen kann und zweitens, wenn auch inhaltsanalytische Befunde verstärkt nicht nur als Basis für experimentelle Stimuli eingesetzt, sondern mit breit angelegten Befragungen von RezipientInnen verknüpft würden. Stärker in der Forschung berücksichtigt werden sollten auch Kombinationen von unterschiedlichen medialen Werbeformen. Kampagnen richten sich häufig über ganz unterschiedliche Medien an die potentiellen KonsumentInnen, und insbesondere Online-Werbung vereint ganz unterschiedliche Werbeformen wie „klassische" Bildanzeigen, Filme und Text. Hinzu kommt, dass online insbesondere personalisierte Werbeformen zum Einsatz kommen, es also abhängig von der Nutzerin und dem Nutzer ist, wie häufig sie/er mit einem Werbeinhalt und unterschiedlichen Werbeformen in Kontakt kommt. Eine Herausforderung der inhaltsanalytischen Operationalisierungen ist also, diese unterschiedlichen medialen Werbeformen jeweils pro Konstrukt einheitlich mess- und damit vergleichbar zu machen und insbesondere bei der Frage danach, wie häufig bestimmte Werbeinhalte und Werbeformen vorkommen, die personalisierte Onlinewerbung zu berücksichtigen.

Literatur

Abernethy, A. M., & Franke, G. R. (1996). The information content of advertising: A meta-analysis. *Journal of advertising, 25*(2), 1-17.

Albers-Miller, N. D., & Stafford, M. R. (1999). An international analysis of emotional and rational appeals in services vs goods advertising. *Journal of consumer marketing, 16*(1), 42-57.

Alden, D. L., Hoyer, W. D., & Lee, C. (1993). Identifying global and culture-specific dimensions of humor in advertising: A multinational analysis. *Journal of Marketing, 57*(2), 64-75.

Alvy, L. M., & Calvert, S. L. (2008). Food marketing on popular children's web sites: A content analysis. *Journal of the American Dietetic Association, 108*(4), 710-713.

Banerjee, S., Gulas, C. S., & Iyer, E. (1995). Shades of green: A multidimensional analysis of environmental advertising. *Journal of advertising, 24*(2), 21-31.

Barker, A. B., Whittamore, K., Britton, J., Murray, R. L., & Cranwell, J. (2019). A content analysis of alcohol content in UK television. *Journal of Public Health, 41*(3), 462–469.

Berlyne, D. E. (1958). The influence of complexity and novelty in visual figures on orienting responses. *Journal of experimental psychology, 55*(3), 289.

Bock, A., Isermann, H., & Knieper, T. (2011). Quantitative content analysis of the visual. In: E. Margolis & L. Pauwels (Hrsg.). *The SAGE handbook of visual research methods* (S. 265-282). London: Sage.

Brader, T. (2006). *Campaigning for hearts and minds: How emotional appeals in political ads work.* University of Chicago Press.

Brady, J., Mendelson, R., Farrell, A., & Wong, S. (2010). Online marketing of food and beverages to children: a content analysis. *Canadian Journal of Dietetic Practice and Research, 71*(4), 166-171.

Burkhalter, J. N., & Thornton, C. G. (2014). Advertising to the beat: An analysis of brand placements in hip-hop music videos. *Journal of Marketing Communications, 20*(5), 366-382.

Cameron, G. T., Ju-Pak, K. H., & Kim, B. H. (1996). Advertorials in magazines: Current use and compliance with industry guidelines. *Journalism & Mass Communication Quarterly, 73*(3), 722-733.

Carlson, L., Grove, S. J., & Kangun, N. (1993). A content analysis of environmental advertising claims: A matrix method approach. *Journal of advertising, 22*(3), 27-39.

Chan, Y., & Fong, F. (2016). An exploratory content analysis of product placement in top grossing films. *Journal of Promotion Management, 22*(1), 107-121.

Cheng, H. (1994). Reflections of cultural values: A content analysis of Chinese magazine advertisements from 1982 and 1992. *International journal of Advertising, 13*(2), 167-183.

Croteau, D., & Hoynes, W. (2019). *Media/society. Technology, Industries, Content, and Users.* Thousand Oaks, CA: Sage.

Culp, J., Bell, R. A., & Cassady, D. (2010). Characteristics of food industry web sites and "advergames" targeting children. *Journal of nutrition education and behavior, 42*(3), 197-201.

Döring, N., & Pöschl, S. (2006). Images of men and women in mobile phone advertisements: A content analysis of advertisements for mobile communication systems in selected popular magazines. *Sex Roles, 55*(3-4), 173-185.

Dovidio, J. F., Hewstone, M., Glick, P., & Esses, V. M. (2010). Prejudice, stereotyping and discrimination. Theoretical and empirical overview. In: J. F. Dovidio, M. Hewstone,P. Glick, & V. M. Esses (Hrsg.), *The SAGE handbook of prejudice, stereotyping and discrimination* (S. 3–28). Los Angeles: Sage.

Eisend, M. (2010). A meta-analysis of gender roles in advertising. *Journal of the Academy of Marketing Science, 38*(4), 418-440.

Eisend, M., Plagemann, J., & Sollwedel, J. (2014). Gender roles and humor in advertising: The occurrence of stereotyping in humorous and nonhumorous advertising and its consequences for advertising effectiveness. *Journal of advertising, 43*(3), 256-273.

Furnham, A. & Mak, T. (1999) Sex-role stereotyping in television commercials: a review and comparison of fourteen studies done on five continents over 25 years. *Sex Roles, 41*(5/6), 413–437.

Furnham, A. & Paltzer, S. (2010) The portrayal of men and women in television advertisements: an updated review of 30 studies published since 2000. *Scandinavian Journal of Psychology, 51*(3), 216–236.

Furnham, A., & Spencer-Bowdage, S. (2002). Sex role stereotyping in television advertisements: A content analysis of advertisements from South Africa and Great Britain. *Communications, 27*(4), 457-483.

Gelman, S. A., Collman, P., & Maccoby, E. E. (1986). Inferring properties from categories versus inferring categories from properties: The case of gender. *Child Development, 57*, 396–404.

Grau, S. L., & Zotos, Y. C. (2016). Gender stereotypes in advertising: a review of current research. *International Journal of Advertising, 35*(5), 761-770.

Hanson, C.B. (2018). Going native on Facebook: a content analysis of sponsored messages on undergraduate student Facebook pages. *International Journal of Internet Marketing and Advertising, 12*(1), 91-104.

Hetsroni, A. (2005). The presentation and reconstruction of art in advertising: A content analysis, a survey of creatives and a general public survey. *Visual Arts Research, 31*(2) 38-56.

Hetsroni, A., & Tukachinsky, R. H. (2005). The use of fine art in advertising: A survey of creatives and content analysis of advertisements. *Journal of Current Issues & Research in Advertising, 27*(1), 93–107.

Huang, Y., & Lowry, D.T. (2012). An analysis of nudity in Chinese magazine advertising: Examining gender, racial and brand differences. *Sex Roles 66*, 440–452.

Huhmann, B. A. (2003) Visual complexity in banner ads. *Visual Communication Quarterly, 10* (3), 10-17.

Jeong, S.-H. (2008). Visual metaphor in advertising: Is the persuasive effect attributable to visual argumentation or metaphorical rhetoric. *Journal of Marketing Communications, 14* (1), 59-73.

Johnson Shen, M., Banerjee, S. C., Greene, K., Carpenter, A., & Ostroff, J. S. (2017). A content analysis of unique selling propositions of tobacco print ads. *American journal of health behavior, 41*(2), 194-203.

Kelly, J. P., & Solomon, P. J. (1975). Humor in television advertising. *Journal of Advertising, 4*(3), 31-35.

Kim, K., Hayes, J. L., Avant, J. A., & Reid, L. N. (2014). Trends in advertising research: A longitudinal analysis of leading advertising, marketing, and communication journals, 1980 to 2010. *Journal of Advertising, 43*(3), 296-316.

Knoll, S., Eisend, M., & Steinhagen, J. (2011). Gender roles in advertising: Measuring and comparing gender stereotyping on public and private TV channels in Germany. *International Journal of Advertising, 30*(5), 867-888.

La Ferle, C., & Edwards, S. M. (2006). Product placement: How brands appear on television. *Journal of advertising, 35*(4), 65-86.

Lee, M., Choi, Y., Quilliam, E. T., & Cole, R. T. (2009). Playing with food: Content analysis of food advergames. *Journal of Consumer Affairs, 43*(1), 129-154.

Lewis, M. K., & Hill, A. J. (1998). Food advertising on British children's television: a content analysis and experimental study with nine-year olds. *International journal of obesity, 22*(3), 206-214.

Mayer, H., & Illmann, T. (2000). *Markt- und Werbepsychologie.* Stuttgart: Schäffer-Poeschel.

McCullough, L. S., & Taylor, R. K. (1993). Humor in American, British, and German ads. *Industrial Marketing Management, 22*(1), 17-28.

Meyer, M., Adkins, V., Yuan, N., Weeks, H. M., Chang, Y. J., & Radesky, J. (2019). Advertising in young children's apps: A content analysis. *Journal of Developmental & Behavioral Pediatrics, 40*(1), 32-39.

Mitchell, A. A. (1986). The effect of verbal and visual components of advertisements on brand attitudes and attitude toward the advertisement. *Journal of consumer research, 13*(1), 12-24.

Mortimer, K. (2000). Are services advertised differently? An analysis of the relationship between product and service types and the informational content of their advertisements. *Journal of Marketing Communications, 6*(2), 121-134.

Naderer, B., Matthes, J., & Spielvogel, I. (2019). How brands appear in children's movies. A systematic content analysis of the past 25 years. *International Journal of Advertising, 38*(2), 237–257.

Nelson, M. R., & Paek, H. J. (2008). Nudity of female and male models in primetime TV advertising across seven countries. *International Journal of Advertising, 27*(5), 715-744.

Parry, K. (2018). Quantitative content analysis of the visual. In: L. Pauwels & D. Mannay (Hrsg.). *The SAGE handbook ofvisual research methods*, 2. ed. (S. 353-366). London: Sage.

Parsons, A. (2013). Using social media to reach consumers: A content analysis of official Facebook pages. *Academy of Marketing Studies Journal, 17*(2), 27-36.

Phillips, B. J., & McQuarrie, E. F. (2004). Beyond visual metaphor: A new typology of visual rhetoric in advertising. *Marketing Theory, 4*(1-2), 113–136.

Pickett, G. M., Grove, S. J., & Laband, D. N. (2001). The impact of product type and parity on the informational content of advertising. *Journal of Marketing Theory and Practice, 9*(3), 32–43.

Pieters, R., Wedel, M., & Batra, R. (2010). The stopping power of advertising: Measures and effects of visual complexity. *Journal of Marketing, 74*(5), 48–60.

Pollay, R. W. (1983). Measuring the cultural values manifest in advertising. *Current issues and research in advertising, 6*(1), 71-92.

Reichert, T. (2002). Sex in advertising research: A review of content, effects, and functions of sexual information in consumer advertising. *Annual review of sex research, 13*(1), 241-273.

Reichert, T., & Carpenter, C. (2004). An update on sex in magazine advertising: 1983 to 2003. *Journalism & Mass Communication Quarterly, 81*(4), 823-837.
Reichert, T., Childers, C. C., & Reid, L. N. (2012). How sex in advertising varies by product category: An analysis of three decades of visual sexual imagery in magazine advertising. *Journal of Current Issues & Research in Advertising, 33*(1), 1-19.
Reichert, T., & Ramirez, A. (2000). Defining sexually oriented appeals in advertising: A grounded theory investigation. In: S. J. Hoch & R. J. Meyer (Hrsg.). *Advances in consumer research *(Vol. 27, S. 267–273). Provo, UT Association for Consumer Research.
Resnik, A., & Stern, B. L. (1977). An analysis of information content in television advertising. *Journal of marketing, 41*(1), 50-53.
Rice, M. D., & Lu, Z. (1988). A content analysis of Chinese magazine advertisements. *Journal of Advertising, 17*(4), 43-48.
Richards, J. I., & Curran, C. M. (2002). Oracles on "advertising": Searching for a definition. *Journal of Advertising, 31*(2), 63-77.
Scharrer, E., Bergstrom, A., Paradise, A., & Ren, Q. (2006). Laughing to keep from crying: Humor and aggression in television commercial content. *Journal of Broadcasting & Electronic Media, 50*(4), 615-634.
Scott, L. M. (1994). Images in advertising: The need for a theory of visual rhetoric. *Journal of consumer research, 21*(2), 252-273.
Segev, S., Fernandes, J., & Hong, C. (2016). Is your product really green? A content analysis to reassess green advertising. *Journal of Advertising, 45*(1), 85-93.
Shabbir, H., & Thwaites, D. (2007). The use of humor to mask deceptive advertising: It's no laughing matter. *Journal of Advertising, 36*(2), 75-85.
Siegert G. (2015). Werbung als medienökonomischer Faktor. In: J. Krone & T. Pellegrini (Hrsg.). *Handbuch Medienökonomie.* Wiesbaden: Springer VS.
Siegert, G., & Brecheis, D. (2005). *Werbung in der Medien-und Informationsgesellschaft*. Wiesbaden: VS Verlag für Sozialwissenschaften.
Steward, D. M., & Furse, D. H. (1986). *Effective television advertising*. Chicago: DC Heath and Company.
Toncar, M. F. (2001). The use of humour in television advertising: revisiting the US-UK comparison. *International Journal of Advertising, 20*(4), 521-539.
Tse, D. K., Belk, R. W., & Zhou, N. (1989). Becoming a consumer society: A longitudinal and cross-cultural content analysis of print ads from Hong Kong, the People's Republic of China, and Taiwan. *Journal of consumer research, 15*(4), 457-472.
Tyrawski, J., & DeAndrea, D. C. (2015). Pharmaceutical companies and their drugs on social media: a content analysis of drug information on popular social media sites. *Journal of Medical Internet Research, 17*(6), e130.
Weber, P., & Fahr, A. (2013). Werbekommunikation. In: W. Schweiger & A. Fahr (Hrsg.). *Handbuch Medienwirkungsforschung* (S. 333-352). Wiesbaden: Springer VS.
Weber, K., Story, M., & Harnack, L. (2006). Internet food marketing strategies aimed at children and adolescents: a content analysis of food and beverage brand web sites. *Journal of the American Dietetic Association, 106*(9), 1463-1466.
Weinberger, M. G., & Campbell, L. (1991). The use and impact of humor in radio advertising. *Journal of Advertising Research, 31*(1), 644-652.
Weinberger, M. G., & Spotts, H. E. (1989). Humor in US versus UK TV commercials: A comparison. *Journal of Advertising, 18*(2), 39-44.

Wojdynski, B. W., & Golan, G. J. (2016). Native advertising and the future of mass communication. *American Behavioral Scientist, 60*(12), 1403-1407.

Zurstiege, G. (2006). Dominanz-/Dependenzbeziehungen? Werbung und Medien. In: K.-D. Altmeppen & M. Karmasin (Hrsg.) *Medien und Ökonomie* (S. 89-101). Wiesbaden: VS Verlag für Sozialwissenschaften.

Dr. Katharina Sommer is a senior research associate at the Zurich University of Applied Sciences ZHAW. She holds a PhD in Communication Science from the University of Zurich. Her research focuses on the role of emotions and intergroup dynamics for media effects and on effects of advertising.





Content Analysis in the Research Field of Social Movements Communication

Gema García-Albacete

1 Introduction

Scholarship on social movements[1] and media is a heavily populated field. There are two main reasons for this: First, it is essentially interdisciplinary, with researchers coming from at least three main fields: sociology, communication research, and the newest field of Internet studies, which is, in essence, interdisciplinary. The second reason is the fact that both the movements and media landscapes have dramatically changed in the last few decades. When it comes to media, two main developments are key: 1) digital social media use has supplemented or arguably displaced mass media use and 2) social media is used to create organizational networks among populations that lack more conventional formal political organizations (Bennett and Segerberg 2015). In terms of movements, we see that they have changed not only how they organize and communicate but also how they create and spread their frames,[2] the actions they take, their mobilization dynamics,

[1] Social movements are often defined as "networks of informal interactions between a plurality of individuals, groups and/or organizations, engaged in political or cultural conflicts, on the basis of shared collective identities" (Diani, 1992).

[2] As summarized by Benford and Snow (2000), the concept of framing within social movements scholarship is derived primarily from the work of Goffman (1974): "frames denoted 'schemata of interpretation' that enable individuals 'to locate, perceive, identify, and label' occurrences within their life space and the world at large" (Benford & Snow 2000 p. 614).

G. García-Albacete (✉)
Universidad Carlos III de Madrid, Getafe, Spanien
E-Mail: gemgarci@clio.uc3m.es

F. Oehmer-Pedrazzi et al. (Hrsg.), *Standardisierte Inhaltsanalyse in der Kommunikationswissenschaft – Standardized Content Analysis in Communication Research*, https://doi.org/10.1007/978-3-658-36179-2_32

etc. With digitally enabled content, we have also witnessed the "supersize effect of protest" (Earl and Kimport 2011, p. 13).

Following these developments, digitally produced content has opened a fruitful field of research, starting with comprehensive studies on the most basic and broadest of questions – what can researchers do with all this information (García-Albacete and Theocharis 2014)—and progressing to the most recent research using information from Twitter to answer specific and novel questions (i.e. Cristancho et al. 2020). A corpus of reviews and state-of-the-art pieces discussing research on communication and social movements or digital media and social movements has been made available (Rohlinger and Earl 2017; Bennett and Segerberg 2015; Earl et al. 2015; Earl 2018; Segerberg and Bennett 2011). Similarly, a systematic review of social media studies using qualitative and mixed-methods studies has been provided, for instance, by Snelson (2016).

This chapter aims to provide a brief overview of the use of content analysis in a selection of studies on social movement communication. Specifically, the first search was restricted to research employing the following keywords: "content analysis" and "communication", and then either "social movement" or "protest." Given the large number of results found for articles indexed in the Journal Citations Report (JCR), I prioritized state-of-the-art and most-cited pieces.[3] The final selection consisted in a large number of research articles, books, and volumes with significant variation in terms of objects of study, theoretical perspectives, research questions, channels of communication that provide empirical evidence and, therefore, methods.

2 Common Research Questions and Objects of Study

The emergence of social media – where social movements and participants interact openly – has provided enormous potential for research. The now very populated area of research on social movements and communication, for which content analysis is being used, could be categorized under four very general headings: 1) studies aimed at answering traditional questions in the area of social movements research; 2) research

[3] The final strategy for selecting relevant research for this qualitative review was to first select those articles that were both indexed in the JCR and included the keywords above. To ensure that all relevant studies were included, studies citing the three most influential articles (the three most-cited were the same for both protests and social movements) were also screened. Overall, 108 studies were selected. Subsequently, articles written in languages other than English and that did not specifically use content analysis as a technique were excluded. The final sample amounted to 72 studies, which were reviewed and complemented with diverse state-of-the-art or review pieces from social movements and communication scholarship. Given the diversity of approaches, a systematic review was not possible. A qualitative approach was used instead, and in this chapter, some of the articles were used to illustrate main trends and arguments. The complete list of articles used for this chapter are available from the author.

answering traditional questions in the area of communication studies; 3) research examining the use and effects of “new” tools and technology; and finally, 4) studies discussing methodological opportunities and challenges posed by digital media.

The first group includes studies that revisit or continue to explore the *traditional questions in social movement research.* These traditional questions are concerned with our understanding of the organization of a social movement, its life-cycle, its tactics, how it frames information, its frame dynamics, its identity, or the solidarity built among its members. By analyzing, for instance, content and comments on Facebook, one could answer a comprehensive set of questions regarding how a specific social movement develops and uses specific frames. For instance, this was the purpose of Harlow’s (2012) study on the Guatemalan’s justice movement. An analysis of the information provided on Facebook allowed her to answer a diversity of questions: Who were the organizers of Guatemala’s Facebook justice movement, and what were their motivations and expectations? Were Facebook users more likely to employ diagnostic, prognostic, or motivational frames? Among users employing the three types of frames in the Facebook comments, which thematic frame was most frequently emphasized: An agency frame, a values frame, an adversarial frame, or a reflective frame? What topical and functional subframes emerged among the Facebook comments? How is the frequency of users’ posts related to the frames and subframes of a comment? What kinds of news information did Guatemalan Facebook users post? What kinds of interactive comments and *interactivity* between the “real” world and “virtual” worlds did Facebook engender?

As discussed earlier, frame analysis is one of the traditional strong lines of research on social movements that can now benefit from large amounts of evidence. Harlow’s study is a good example of the use of content analysis of digital information to explore the internal organization of movements. Other examples focus on less formally organized protest events or movements such as the Gezi Park protest’s use of tweets (Ogan and Varol 2017).

Within the same group, some researchers focused on the question of how movements use media or social media to mobilize and create awareness: A broad category ranged from the analysis of the ads strategy of the Civic Rights Movement in the *New York Times* (Ross 1998) to the content analysis of movement websites (Stein 2009) and how specific protest movements used Facebook (Katz-Kimchi and Manosevitch 2015) or Twitter data (García-Albacete and Theocharis 2014; see also Theocharis et al. 2015). A good example of digital content analysis in exploring how a component of social movements, as a relevant collective identity, is developed using new communication protocols online is the work of Coretti and Pica (2015) of the Il Popolo Viola anti-Berlusconi protests in Italy between 2009 and 2011.

A classical question within social movement research refers to the *life cycle* of protest movements, and digitally created content is a useful means through which to address this issue. For example, we can now witness the evolution from a social movement to a new political party, which was the case of *Barcelona En Comú* (García-Carretero

and Díaz-Noci' 2018), similarly Borge and Santamarna' (2016) study how movements develop into parties and construct their identities, manifestos, etc.

A major research strand deals with the analysis of activists or sympathizers during protest events or movements, but some studies have also examined the reaction of politicians during concrete events, such as Yavuz et al. (2018) during the Gezi Park protests in the summer of 2013. Alternatively, some studies have focus on how individual citizens get the attention of political elites in their protests during electoral campaigns (Sibinescu 2016).

A second strand of literature addresses *traditional questions in the area of political communication.* What this group of studies have in common is that they explicitly or implicitly use or refer to how media frame social movements, often employing content analyses of press outlets. The studies in this group vary significantly in their focus. Many examine how protest is framed in the media. Grimm and Andsager (2011), for example, showed that protest frames in the news vary according to the geo-ethnic context. Sneyd et al. (2013) worked on food riots across countries in Africa from 2007 to 2011. Cammaerts (2013) analyzed student protests in London and their symbolic damage in the press. Castro et al. (2018) examined Portuguese protests toward nature laws. Other instances include studies focusing on how the characteristics of the media outlet (i.e., geographical interest) might change how newspapers frame movements (Veneti et al. 2016); whether the characteristics of a movement were reflected in the media or conditioned by the media coverage of the movement (Kowalchuk 2010); or the relationship between media coverage and public support for a movement (Vliegenthart et al. 2005), to name a few.

A third broad group of studies is organized under common questions about *how movements use "new" technological tools* in light of the emergence and spread of new technology, digital tools, and skills. If, traditionally, one looked at newspaper ads to anderstand how movements used media to mobilize or create awareness (Ross 1998), the question now is how movements use social media, whether it is Facebook, Twitter, YouTube, or blogs (i.e., Avigur-Eshel and Berkovich 2017; Drueeke and Zobl 2016; García-Albacete and Theocharis 2014; Katz-Kimchi and Manosevitch 2015; Smith et al. 2015; Stein 2009).

Furthermore, digital tools bring about new forms of activism for exploration, for instance, in the case of videos and their diffusion. For example, using videos posted on YouTube, Thorson et al. (2010) posed several questions: Are videos circulated during protest movements amateur or professional? Do they report on life events? To what extent are they edited? Do they change as the debate progresses? How do audiences change according to the video's format? Another fruitful line of inquiry uses and analyzes images. For instance, using images from the Egyptian revolution, Kharroub and Bas (2016) sought to contribute to a theory of user-generated content during political movements. The diffusion of images has become a main tool for protest movements aroand the word and provide the opportunity to explore the most dominant visual themes, the emotions they try to trigger, and how they change as the protest evolves. The

macro information provided by social media (such as the number of retweets or images circulated) provides key movement-related information. Similarly, Casas and Williams (2019) analyzed the effect of emotions from pictures and their ability to mobilize people onto the streets in the Black Lives Matter movement.

Finally, a fourth group of studies focus on the *methodological opportunities and challenges brought about by digital media* for social movement and protest research. In this vein, some of the most-cited studies pioneered the analysis of social movements' use of websites (Stein 2009) or Twitter (García-Albacete and Theocharis 2014) and, thus, elaborated on the potential of digital content in addressing old and new questions, even if it is from a descriptive or exploratory perspective. The latest work on methodological issues is much more sophisticated and has moved to (and lobby for) the need to integrate information across platforms to have a better understanding of specific movements (Driscoll and Thorson 2015; Von Nordheim et al. 2018).

3 Trends in Methodology

In terms of the communication channel through which the empirical evidence was gathered or produced, there was also considerable variation. Earlier work focused heavily on print newspapers. As Rohlinger and Earl (2017) noted, until digital and social media were added to the toolbox, the study of media and social movements was a subfield primarily focused on newspaper coverage. From the social movement research front, the norm were interviews with activists, professionals in movement organizations, and journalists. Others used internal documents from movements (i.e., Payerhin, 1996). For digital content, earlier work used websites and blogs as they were developed first. Later studies incorporated the analysis of social media data, such as from Facebook or Twitter, or pieces of the information included in a tweet, for instance, media links distributed in social networks (Segerberg and Bennett 2011). Soon after, there was a focus on the distribution of videos (Hermida and Hernandez-Santaolalla 2018; Thorson et al. 2010) and images (Kharroub and Bas 2016; Neumayer and Rossi 2018). Another common strategy was the combination of content distributed through at least one of the social media channels with other data such as media reports of movements and in-depth interviews. If a trend is detectable, it likely involved the combination of empirical evidence coming from different communication channels.

A review of the literature selected in this chapter showed that systematic manual coding was the most commonly used methodology, independently of the channel of communication from which the text originated. The usual strategy behind this methodology was the development of a codebook, with the evidence and research questions at hand, and the systematic manual coding after inter-coder reliability tests had been conducted. Complete codebooks were occasionally reported in publications. Most importantly, few of the studies revised referred to previous study variables and categories when presenting their coding procedure, so it is unclear whether the variables and codes

were developed ad hoc or built on previous studies. This commonly used exploratory approach, which is based on developing a codebook as researchers separately analyze information for each protest event or movement, is useful in gaining a better grasp of the characteristics of a specific case of contentious politics, especially since replication might not be the primary goal of many studies. The lack of replication, however, might be a limitation of this subfield, and it is surely a limitation for the original goal of the present review of identifying specific variables and how they are usually coded.

Another clear trend in the existing research was the combination of methodologies. A large number of studies combined qualitative and quantitative (primarily systematic manual coding) approaches of data collection and analysis. A common strategy, for instance, was the above-mentioned combination of in-depth interviews along with the quantitative manual coding of social media text. Others combined two quantitative methodologies, such as a combination of social network analysis and Twitter conversations (Himelboim et al. 2013; Ogan and Varol 2017; Papacharissi and Oliveira 2012; Wonneberger et al. 2020). A trend could also be observed regarding the use of computer assisted or automated methodologies with manual coding. In the political communication studies, an increasingly common combination consisted of a computer assisted search of articles that were then manually coded (Cinalli and Giugni 2016; Veneti et al. 2016). State-of-the-art methodologies were constantly developed as different types of evidence were being incorporated, such as videos and images. In addition, a number of voices have started advocating for greater integration of information gathered across platforms in order to avoid potential biases (Von Nordheim et al. 2018). For instance, Driscoll and Thorson (2015) used the 2011 Occupy Movement protests and the 2013 consumer boycotts to illustrate methods for creating integrated datasets of political event-related social media content by using 1) fixed URLs to link posts across platforms (URL-based integration) and 2) semiautomated text clustering to identify similar posts across social networking services (thematic integration). These approaches helped them identify biases in the way that previous studies characterized political communication practices when focusing on a single platform. For example, by only analyzing a video uploaded to YouTube by a movement, we can gather valuable information to anderstand the movement. However, we might overlook the specific use, the extent of the diffusion of that video, and its effectiveness in, for example, a call for action than if we were to add information from other platforms, such as an analysis of tweets linked to that same video.

4 Research Desiderata

As a flourishing field, content analysis of social movements has changed significantly in the past years with the integration of new types of data, additional protests movements, and the creation of specific subfields, making it an exciting area of study with a great deal of potential. Furthermore, it is an interdisciplinary area with increasing

opportunities and avenues for collaboration. However, interdisciplinarity, increasingly available data, and continuously emerging objects of study pose some relevant challenges. To begin with, anything Internet-related is often treated as a new object of study, but as Rohlinger and Earl (2017, p. 8) pointed out, "there was protest before the internet and there is literature about it." Ignoring this history impedes knowledge accumulation. Furthermore, I would add that ignoring previous research means a failure to use the many opportunities brought about by newly available empirical evidence and information to answer important – and often classic – questions in the discipline.

A second challenge is the disconnect between studies (at least explicitly), which has resulted in a large and eclectic knowledge base regarding different movements, protest events, communication practices, and so on but little integration that would permit a speedier accumulation of knowledge. To illustrate this point, say we gather protest-related information on the type of users that distribute posts or information in social media. By systematically analyzing the evidence at hand, we can identify and organize categories of users (e.g., activists, alternative media, movement organization, politicians, etc.). However, it is only by comparing these categories to those developed in previous research can we identify the unique aspects of that specific movement. If, say, we find a large number of types of actors but we do not compare our findings against other studies, we overlook the fact that formal organizations are only marginally involved in the calls for action circulated by the movement. The informality of the movement might be one of its main characteristics, but without a systematic comparison to other movements, the picture would be incomplete. Further comparative work using content analysis or the same coding schemes for different case studies could provide standardized codes and variables to measure specific concepts and, thus, test theoretical claims in a wider context, with the obvious advantage of theoretical development.

To sum up, content analysis of the role of media in contentious politics is a vibrant research area, with a large number of subfield-specific research questions. In terms of methodology, the systematic manual coding of texts has become a standard approach. Given the expansion of this technique, researchers are increasingly adjusting to best practices in terms of developing coding schemes, assuring high inter-coder reliability standards, and the reporting of coding procedures. However, there is some room for improvement in terms of knowledge accumulation. This review has identified at least two avenues: the combination of classical scholarship with digitally created evidence and an explicit effort to test concepts and measurement instruments across diverse protest movements. Finally, as automated analyses of large datasets (text, geographical, etc.) and big data evolve, research on social movements will most likely develop substantially in the years to come.

References

Avigur-Eshel, A., & Berkovich, I. (2017). Using Facebook differently in two education policy protests. *Transforming government: People, process and policy*, 11 (4), 596—611. https://doi.org/10.1108/TG-06-2017-0029

Benford, R. D., & Snow, D. A. (2000). Framing processes and social movements: An overview and assessment. *Annual Review of Sociology, 26*(1), 611–639. https://doi.org/10.1146/annurev.soc.26.1.611

Bennett, W. L., & Segerberg, A. (2015). Communication in movements. In D. Della Porta & M. Diani (Eds.), *The Oxford handbook of social movements* (pp. 367--382). Oxford University Press. https://doi.org/10.1093/oxfordhb/9780199678402.013.39

Borge Bravo, R., & Santamarina Saez, E. (2016). From protest to political parties: Online deliberation in new parties in Spain. *Medijske Studije-Media Studies, 7*(14), 104–122. https://doi.org/10.20901/ms.7.14.8

Cammaerts, B. (2013). The mediation of insurrectionary symbolic damage: The 2010 U.K. student protests. *International Journal of Press-Politics, 18*(4), 525–548. https://doi.org/10.1177/1940161213496283

Casas, A., & Williams, N. W. (2019). Images that matter: Online protests and the mobilizing role of pictures. *Political Research Quarterly*, *72*(2), 360–375. https://doi.org/10.1177/1065912918786805

Castro, P., Seixas, E., Neca, P., & Bettencourt, L. (2018). Successfully contesting the policy sphere: Examining through the press a case of local protests changing new ecological laws. *Political Psychology, 39*(1), 107–123. https://doi.org/10.1111/pops.12388

Cinalli, M., & Giugni, M. (2016). Introduction to the special issue: Citizens' responses to the European economic crisis in the public domain. *Politics & Policy, 44*(3), 388–399. https://doi.org/10.1111/polp.12158

Coretti, L., & Pica, D. (2015). The rise and fall of collective identity in networked movements: Communication protocols, Facebook, and the anti-Berlusconi protest. *Information Communication & Society, 18*(8), 951–967. https://doi.org/10.1080/1369118X.2015.1043317

Cristancho, C., Anduiza, E., Congosto, M., & Majo-Vazquez, S. (2020). Participation and medial contentious responses to the crises in Spain: Emphasis frames and public support for protest on Twitter and the press. *International Journal of* Communication, 14, 3266–3288.

Diani, M. (1992). The concept of social movement. *The Sociological Review, 40*(1), 1–25. https://doi.org/10.1111/j.1467-954X.1992.tb02943.x

Driscoll, K., & Thorson, K. (2015). Searching and clustering methodologies: Connecting political communication content across platforms. *Annals of the American Academy of Political and Social Science, 659*(1), 134–148. https://doi.org/10.1177/0002716215570570

Drueeke, R., & Zobl, E. (2016). Online feminist protest against sexism: The German-language hashtag #aufschrei. *Feminist Media Studies, 16*(1), 35–54. https://doi.org/10.1080/14680777.2015.1093071

Earl, J. (2018). Technology and social media. In David A. Snow, Sarah A. Soule, Hanspeter Kriesi, Holly J. McCammon, *The Wiley Blackwell companion to social movements* (pp. 289–305). John Wiley & Sons, Ltd. https://doi.org/10.1002/9781119168577.ch16

Earl, J., & Kimport, K. (2011). *Digitally enabled social change: Activism in the Internet age*. The MIT Press. https://doi.org/10.2307/j.ctt5hhcb9

Earl, J., Hunt, J., Garrett, R. K., & Dal, A. (2015). New technologies and social movements. In D. Della Porta & M. Diani (Eds.), *The Oxford handbook of social movements* (pp. 355-–366). Oxford University Press. https://doi.org/10.1093/oxfordhb/9780199678402.013.20

García-Albacete, G., & Theocharis, Y. (2014). Opportunities and challenges of analysing Twitter content: A comparison of the occupation movements in Spain, Greece and the United States. In M. Cantijoch, R. Gibson, & S. Ward (Eds.), *Analyzing social media data and web networks* (pp. 119–153). Palgrave Macmillan. https://doi.org/10.1057/9781137276773_6

Garcia-Carretero, L., & Diaz-Noci, J. (2018). From social movements to political parties. Barcelona En Comu's electoral message, uses and limitations on Twitter during 2015 city council election. *Obets-Revista De Ciencias Sociales, 13*(2), 515–545. https://doi.org/10.14198/OBETS2018.13.2.03

Goffman, E. (1974). *Frame analysis: An essay on the organization of experience*. Harper & Row. http://books.google.com/books?id=7oRqAAAAMAAJ

Grimm, J., & Andsager, J. L. (2011). Framing immigration: Geo-ethnic context in California newspapers. *Journalism & Mass Communication Quarterly, 88*(4), 771–788. https://doi.org/10.1177/107769901108800406

Harlow, S. (2012). Social media and social movements: Facebook and an online Guatemalan justice movement that moved offline. *New Media & Society, 14*(2), 225–243. https://doi.org/10.1177/1461444811410408

Hermida, A., & Hernandez-Santaolalla, V. (2018). Twitter and video activism as tools for counter-surveillance: The case of social protests in Spain. *Information Communication & Society, 21*(3), 416–433. https://doi.org/10.1080/1369118X.2017.1284880

Himelboim, I., McCreery, S., & Smith, M. (2013). Birds of a feather tweet together: Integrating network and content analyses to examine cross-ideology exposure on Twitter. *Journal of Computer-Mediated Communication, 18*(2), 154–174. https://doi.org/10.1111/jcc4.12001

Katz-Kimchi, M., & Manosevitch, I. (2015). Mobilizing Facebook users against Facebook's energy policy: The case of Greenpeace Unfriend Coal Campaign. *Environmental Communication-a Journal of Nature and Culture, 9*(2), 248–267. https://doi.org/10.1080/17524032.2014.993413

Kharroub, T., & Bas, O. (2016). Social media and protests: An examination of Twitter images of the 2011 Egyptian revolution. *New Media & Society, 18*(9), 1973–1992. https://doi.org/10.1177/1461444815571914

Kowalchuk, L. (2010). Multisectoral movement alliances and media access: Salvadoran newspaper coverage of the health care struggle. *Latin American Politics and Society, 52*(4), 107–135. https://doi.org/10.1111/j.1548-2456.2010.00100.x

Neumayer, C., & Rossi, L. (2018). Images of protest in social media: Struggle over visibility and visual narratives. *New Media & Society, 20*(11), 4293–4310. https://doi.org/10.1177/1461444818770602

Ogan, C., & Varol, O. (2017). What is gained and what is left to be done when content analysis is added to network analysis in the study of a social movement: Twitter use during Gezi Park. *Information, Communication & Society, 20*(8), 1220–1238.

Papacharissi, Z., & Oliveira, M. de F. (2012). Affective news and networked publics: The rhythms of news storytelling on #Egypt. *Journal of Communication, 62*(2), 266–282. https://doi.org/10.1111/j.1460-2466.2012.01630.x

Payerhin, M. (1996). Terms of endearment: Intellectuals and workers mobilizing for a social movement. *Communist and Post-Communist Studies, 29*(2), 185–212. https://doi.org/10.1016/S0967-067X(96)80005-5

Rohlinger, A. D., & Earl, J. (2017). The past, present, and future of media and social movements studies: Introduction to the special issue on media and social movements. In J. Earl & D. A. Rohlinger (Eds.), *Studies in media and communications* (Vol. 14, pp. 1–20). Emerald Publishing Limited. https://doi.org/10.1108/S2050-206020170000014004

Ross, S. D. (1998). “Their rising voices”: A study of civil rights, social movements, and advertising in the *New York Times*. *Journalism & Mass Communication Quarterly, 75*(3), 518–534. https://doi.org/10.1177/107769909807500307

Segerberg, A., & Bennett, W. L. (2011). Social media and the organization of collective action: Using Twitter to explore the ecologies of two climate change protests. *The Communication Review, 14*(3), 197–215. https://doi.org/10.1080/10714421.2011.597250

Sibinescu, L. E. (2016). Protest, citizen engagement and the coproduction of political communication: The case of Romania’s 2014 presidential elections. *Medijske Studije-Media Studies, 7*(14), 142–156. https://doi.org/10.20901/ms.7.14.10

Smith, B. G., Men, R. L., & Al-Sinan, R. (2015). Tweeting Taksim communication power and social media advocacy in the Taksim square protests. *Computers in Human Behavior, 50*, 499–507. https://doi.org/10.1016/j.chb.2015.04.012

Snelson, C. L. (2016). Qualitative and mixed methods social media research: A review of the literature. *International Journal of Qualitative Methods*. https://doi.org/10.1177/1609406915624574

Sneyd, L. Q., Legwegoh, A., & Fraser, E. D. G. (2013). Food riots: Media perspectives on the causes of food protest in Africa. *Food Security, 5*(4), 485–497. https://doi.org/10.1007/s12571-013-0272-x

Stein, L. (2009). Social movement web use in theory and practice: A content analysis of US movement websites. *New Media & Society, 11*(5), 749–771. https://doi.org/10.1177/1461444809105350

Theocharis, Y., Lowe, W., van Deth, J. W., & García-Albacete, G. (2015). Using Twitter to mobilize protest action: Online mobilization patterns and action repertoires in the Occupy Wall Street, Indignados, and Aganaktismenoi movements. *Information, Communication & Society, 18*(2), 202–220. https://doi.org/10.1080/1369118X.2014.948035

Thorson, K., Ekdale, B., Borah, P., Namkoong, K., & Shah, C. (2010). YouTube and Proposition 8: A case study in video activism. *Information Communication & Society, 13*(3), 325–349. https://doi.org/10.1080/13691180903497060

Veneti, A., Karadimitriou, A., & Poulakidakos, S. (2016). Media ecology and the politics of dissent: Representations of the Hong Kong protests in *The Guardian* and *China Daily*. *Social Media + Society, 2*(3). https://doi.org/10.1177/2056305116662175

Vliegenthart, R., Oegema, D., & Klandermans, B. (2005). Media coverage and organizational support in the Dutch environmental movement. *Mobilization, 10*(3), 365–381.

Von Nordheim, G., Boczek, K., Koppers, L., & Erdmann, E. (2018). Digital traces in context| Reuniting a divided public? Tracing the TTIP debate on Twitter and in traditional media. *International Journal of Communication, 12*, 548–569

Wonneberger, A., Hellsten, I. R., & Jacobs, S. H. (2020). Hashtag activism and the configuration of counterpublics: Dutch animal welfare debates on Twitter. *Information, Communication & Society,* 1–18.

Gema García-Albacete is Assistant Professor at the Department of Social Sciences of Universidad Carlos III de Madrid. Her research relates to citizens’ inequalities in political interest, knowledge and political participation across Western democracies. A list of her publications is available at www.garcia-albacete.com and she tweets @ggalbacete.


BY



Die Inhaltsanalyse im Forschungsfeld der Justizkommunikation & Litigation-PR

Franziska Oehmer-Pedrazzi

1 Einleitung

In modernen Gesellschaften ist auch die Justiz aufgrund des hohen Stellenwertes publizistischer und digitaler Medien als Informations- und Meinungsbildungsquelle zunehmend auf mediale, öffentliche Kommunikation angewiesen – auch wenn sie anders als PolitikerInnen und Parteien meist nicht direkt um Wählerstimmen buhlen müssen (Collins und Cooper 2015; Davis 2011): Denn nur indem Informationen über rechtliche Prozesse und Urteile transparent gemacht und vermittelt werden, kann für die Legitimation und Anerkennung der Gerichte und ihrer Entscheide in der Bevölkerung geworben werden (vgl. Altenhain 2016; Branahl 2005; Becker-Toussaint 2009; Hanske und Lauber-Rönsberg 2013; Koppenhöfer 2012; Meyer 2019; Trüg 2011; Widmaier 2004, S. 399). „Die Medien sind das zentrale Sprachrohr der Justiz" resümiert Winfried Hassemer (2009, S. 16; vgl. auch Taras 2017), ehemaliger Vizepräsident des deutschen Bundesverfassungsgerichts. Zudem sind die Justiz und Gerichtsprozesse auch ohne eigenes Zutun bereits häufig im Fokus medialen Interesses, da sie Aufmerksamkeit erregende Merkmale, wie die Nachrichtenfaktoren Schaden, Konflikt und auch Emotionalisierung auf sich vereinen können (Heinrich 2012). Die Justiz, so die Forderung vieler PraktikerInnen, müsse sich daher in einer komplexer werdenden Gesellschaft selbst und in einer für Laien verständlichen Sprache erklären und zu juristischen Fragen in die Öffentlichkeit einbringen können, auch um Fehlinter-

F. Oehmer-Pedrazzi (✉)
Fachhochschule Graubünden, Bern, Schweiz
E-Mail: franziska.oehmer@fhgr.ch

F. Oehmer-Pedrazzi et al. (Hrsg.), *Standardisierte Inhaltsanalyse in der Kommunikationswissenschaft – Standardized Content Analysis in Communication Research,* https://doi.org/10.1007/978-3-658-36179-2_33

pretationen und falschen Aussagen über die Justiz vorzubeugen (Hassemer 2009; Hitt and Searles 2018, Staton 2004).

Neben diesen, aus normativer Perspektive wünschenswerten, Kommunikationszielen und -motiven, sehen juristische Akteure Kommunikationsmaßnahmen – v. a. während Gerichtsprozessen – häufig auch als Teil der Verteidigungsstrategie und der juristischen Arbeit an (Kottkamp 2015). In seiner bereits 1987 veröffentlichten Monographie „Strafprozeßführung [sic] über Medien" verweist Wagner (S. 7–8) auf den taktischen Einsatz von Medienarbeit: „Was Beschuldigte, Anwälte Richter und Politiker öffentlich als Vorverurteilungen oder Vorfreisprüche beklagen, entspricht in Wirklichkeit häufig einem klaren prozeßstrategischen [sic] Kalkül von Verteidigern, Polizei oder Staatsanwaltschaft." Der Gerichtsreporterin Gisela Friedrichsen (2007, S. 34) zufolge hat diese prozessbegleitende Kommunikation in den vergangenen Jahrzehnten an Bedeutung gewonnen: „Konnten sich früher seriöse Anwälte noch der Medien enthalten, liefern sie heute ihre Mandanten mit einer solchen Einstellung dem Pranger der Spekulationen aus." Wenig überraschend werden daher auch staatsanwaltschaftliche BerufsanfängerInnen im Rahmen von Pflichtveranstaltungen im Umgang mit den Medien geschult (Becker-Toussaint 2009, S. 43). Im kommunikationspraktischen und wissenschaftlichen Diskurs hat sich mittlerweile die Bezeichnung Litigation-PR für strategische Kommunikationsprozesse vor, während und nach Gerichtsprozessen oder rechtlichen Auseinandersetzungen wie bspw. bei Strafverfahren und Patentstreitigkeiten oder auch im Bereich des Kartell- und Kartellschadensersatzrechts etabliert (Wohlrabe 2020): Der Name setzt sich aus dem englischen Begriff „Litigation" für Prozess, Gerichtsverfahren oder Rechtsstreitigkeit einerseits, und «PR» für Public Relations, das im deutschsprachigen Raum mit Öffentlichkeitsarbeit übersetzt wird, andererseits zusammen (Heinrich 2012; Holzinger 2009). Ziel ist dabei zum einen die öffentliche Meinung im eigenen Interesse zu beeinflussen, um damit wiederum auch bei den EntscheiderInnen ein unterstützendes Votum bewirken zu können (Haggerty 2003). Zum anderen soll mithilfe von Litigation-PR auch ein bereits geschädigter Ruf durch Krisen- und Reputationsmanagement verbessert werden (Haggerty 2003; Heinrich 2012; Holzinger 2009; Reber et al. 2006). Schmitt-Geiger (2014) spricht in diesem Zusammenhang von Angriffs- und Verteidigungsmandat. Welches Ziel im jeweiligen Rechtsstreit von Relevanz ist, hängt ab vom Rechtsgebiet (Strafrecht, Zivilrecht, …) und ob die Öffentlichkeitsarbeit für die Kläger- oder Beklagtenseite geleistet wird: Es wird angenommen, dass sich vor allem VertreterInnen von Beklagten in Strafrechtsfällen um Reputationsmanagement bemühen müssen (vgl. Heinrich 2012).

2 Trends inhaltanalytischer Studien zur Justizberichterstattung

Forschung und insbesondere empirische Studien zur Justizkommunikation und Litigation-PR sind insgesamt eher limitiert (vgl. Rademacher und Bühl 2012, S. 244; Taras 2017). Überblickswerke und Sammelbände widmen sich dem Thema meist

aus einer theoretisch-konzeptionellen, rechtlichen oder kommunikationspraktischen Perspektive (vgl. Rademacher und Schmitt-Geiger 2012; Wohlrabe 2020). Auch der Sammelband „Justices and Journalists. The Global Perspective“ von Davis und Taras (2017), vereint v. a. Überblicksdarstellungen zur Entwicklung der Pressearbeit des jeweils höchsten Gerichts ausgewählter Länder weltweit, jedoch ohne klaren empirischen Fokus.

Die wenigen sozialwissenschaftlichen Studien stützen sich zudem meist auf Befragungs- und Interviewdaten mit Akteuren der Justiz (vgl. Baugut et al. 2019; Gies 2005; Johnston und McGovern 2013; Kottkamp 2015; Peleg und Bogoch 2014; Rademacher und Bühl 2012; Scheu 2019). Die (meist nicht standardisierten) inhaltsanalytischen Studien zur Justizkommunikation und Litigation-PR fokussieren auf die Medienarbeit einzelner Gerichte (Bundesverfassungsgericht in den USA) oder im Zusammenhang einzelner Gerichtsfälle und Rechtsstreitigkeiten, häufig mit prominenter Beteiligung (Köhler und Langen 2012 zum Fall „Kachelmann“; Reber et al. 2006 zu den Fällen „Martha Stewart“, „Richard Scrutchy“ und „Michael Jackson“). Theoretische Schwerpunkte (bspw. Reber et al. 2006: Modell der PR von Grunig; Delitz 1986: Determinationshypothese…) oder eine Präferenz für bestimmte Studiendesigns (Input–Output-Analysen) oder Methodenkombinationen sind aufgrund der geringen Anzahl der Studien nicht abschließend auszumachen.

Gründe für den vergleichsweise überschaubaren (empirischen) Forschungsstand zur Justizkommunikation und Litigation-PR liegen u. a. darin begründet, dass die Justiz selbst – v. a. im Vergleich zu anderen politischen Institutionen und Akteuren – lange Zeit zurückhaltend und wenn, dann meist in einer für Laien nicht nachvollziehbaren Fachsprache einseitig kommuniziert (vgl. Meyer 2019; Reber et al. 2006) und damit auch wenig Anlass für Analysen geboten hat (Johnston und McGovern 2013; Rath 2015; Scheu 2019; Strother 2017): In einer durchschnittlichen Medienmitteilung des deutschen Bundesverfassungsgerichtes wird bspw. die richterliche Entscheidung meist im Originalwortlaut, d. h. in juristischer Sprache auf rund zwei bis vier Druckseiten (bei komplexeren Urteilen bis zu zehn Seiten) wiedergegeben (vgl. Rath 2015; Meyer 2019).

3 Ergebnisse inhaltanalytischer Studien zur Justizberichterstattung

Inhaltsanalytische Studien zu den Inhalten von Justizkommunikation interessieren sich zum einen für die vermittelten *Informationen über die Justiz, Gerichte und Prozesse.* Zum anderen werden der Stellenwert und die Inhalte von strategischer Justizkommunikation – *Litigation-PR* – untersucht. Aufgrund des überschaubaren Forschungsstandes werden nachfolgend nicht nur Studien berücksichtigt, die mehrheitlich auf einer (standardisierten) Inhaltsanalyse basieren, sondern auch Erkenntnisse besprochen, die in Publikationen als Randinformationen und daher häufig ohne umfassende methodische Einordnung (bspw. zur Grundgesamtheit, zu Qualitätsindikatoren) vermittelt werden.

Informationen über Justiz, Gerichte und Prozesse
Welche Informationen in Medienmitteilungen von Gerichten vermittelt werden, wurde durch die Analyse des Medienmitteilungstyps erfasst: Das deutsche Bundesverfassungsgericht veröffentlichte im Jahr 2017 bspw. 117 Medienmitteilungen – 60 % davon informierten über die Entscheide selbst, 20 % enthielten Ankündigungen, 11 % beschrieben organisationsspezifische Informationen (wie bspw. Jubiläen) und 9 % thematisierten Kontakt- und Besuchsmöglichkeiten des Gerichts (Holtz-Bacha 2017, S. 109). Auch Meyer (2019) unterscheidet zwischen „Entscheid bezogenen Medienmitteilungen", „Entscheidankündigungen", „Ankündigung von mündlichen Anhörungen" und „Sonstiges".

Delitz (1986) ging der Frage nach, welche Inhalte der staatsanwaltlichen Medienmitteilungen des Jahres 1983 auf mediale Resonanz in regionalen und überregionalen Tageszeitungen stoßen. Er identifiziert dabei einen durchschnittlichen Selektionsanteil, d. h. eine Berücksichtigung der in Medienmitteilungen besprochenen oder angekündigten Fälle in der Medienberichterstattung in Höhe von 32.9 % wobei die regionalen Tageszeitungen und Boulevardmedien die höchste, die linke überregionale Tageszeitung taz die geringste Übernahmewahrscheinlichkeit aufwiesen (ebenda, S. 519). Beeinflusst wird der Selektionsanteil durch die Medien zum einen von der Pressemitteilung (Informationsanteil, gemessen an der Zeilenlänge der Falldarstellung) selbst. Zum anderen spielen fallspezifische Merkmale eine Rolle: In den Medien werden vor allem die in den Medienmitteilungen thematisierten erstinstanzlichen und umfangreichen Fälle, die spezifische Deliktstypen (Tötungs- oder Amtsdelikte) verhandeln, aufgegriffen. Auch Gerichtsprozesse in denen prominente Personen involviert sind, werden wahrscheinlicher von JournalistInnen aufgegriffen. Delitz (1986) räumt jedoch ein, dass der starke Niederschlag staatsanwaltschaftlicher Medienarbeit in der journalistischen Berichterstattung nicht nur als Determination verstanden werden dürfe. Schließlich könne die starke Übernahme auch mit den antizipierten Medienlogiken durch die Pressestelle der Staatsanwaltschaft erklärt werden, die in ihren Mitteilungen vor allem solche Fälle und Fallmerkmale berichten, die für JournalistInnen potenziell von Interesse sein könnten. Dass diese Erwägungen tatsächlich eine Rolle bei der juristischen Medienarbeit spielen können, zeigt auch ein Befund von Meyer (2019), der in seiner Studie analysierte, welche Faktoren den Versand von Medienmitteilungen (Publikation Medienmitteilung ja/nein) durch Gerichte selbst determinieren. Er stellt fest, dass vor allem Gerichtsurteile, die einen vorhergehenden niedrig-instanzlichen Entscheid korrigieren oder Status Quo-Änderungen bedeuten und damit den Nachrichtenfaktor Konflikt bzw. Status enthalten, häufiger in einer Medienmitteilung besprochen werden.

Stellenwert und die Inhalte von strategischer Justizkommunikation – Litigation-PR
Dass es in der juristischen Medienarbeit nicht nur um die Vermittlung juristischer Entscheide und Prozesse geht, sondern auch strategische Erwägungen eine Rolle spielen, trägt der Forschungszweig Rechnung, der sich mit den Inhalten von Litigation-PR auseinandersetzt.

Köhler und Langen (2012) analysierten – in einer qualitativen Inhaltsanalyse – im Fall Kachelmann, inwiefern die Öffentlichkeitsarbeit der Staatsanwaltschaft den Prinzipien der Objektivitätspflicht, des Persönlichkeitsrechts und dem Gebot der Unschuldsvermutung entspricht: Bei der Inhaltsanalyse konnten die Autoren zeigen, dass durch die explizite Nennung des Verhaftungsortes und des Berufs auch ohne Nennung des Namens für die Presse eine eindeutige Identifizierung Jörg Kachelmanns aus der ersten Pressemeldung der Staatsanwaltschaft zur Festnahme deutlich wurde. Die Staatsanwaltschaft ist damit über die presserechtliche Auskunftspflicht hinaus gegangen.

Welche Rolle das Internet respektive persönliche Webseiten von prominenten Angeklagten als direktes, von journalistischen Gatekeepern unabhängiges, Kommunikationsmittel in Prozessen spielen, analysierten Reber et al. (2006). Ihr Interesse galt dabei den gewählten Kommunikationsmodi, der Dialogorientierung resp. Ansprache und Einbindung der Nutzenden der Webseite (gemessen anhand der Dimensionen „dialogic loop", „useful information", „encouragement of return visits", „ease of navigation" und „conservation of visitors", nach u. a. Kent und Taylor (2003), sowie dem Einsatz von vordefinierten Litigation-PR-Frames wie bspw. „negativer Publicity entgegenwirken", „den Standpunkt des/der Klienten/in bekannt machen", „für eine ausgewogene Berichterstattung in den Medien sorgen" (ebenda, S. 34; Übersetzung von der Autorin). Ihren Erkenntnissen zufolge werden vor allem einseitige, weniger dialogorientierte oder Besucher-bindende Inhalte, sondern vor allem Pressemitteilungen, rechtliche Dokumente und andere relevante, „nützliche" Informationen auf den Webseiten vermittelt. Am häufigsten wurde auf den Webseiten der Frame „negativer Publicity entgegenwirken" (68.8 %) sowie „für eine ausgewogene Berichterstattung in den Medien sorgen" (55.8 %) identifiziert. Vergleichsweise selten wird der Frame „Hilfe für die Konfliktlösung zur Verfügung stellen" auf den Webseiten verwendet.

4 Forschungsdesiderata

Das Wissen um die Kommunikationspraxis und -inhalte der Justiz ist nach wie vor beschränkt (vgl. zusammenfassende Darstellung in Tab. 1): Welche Informationen über das Recht und die Rechtsprechung in welcher Form (Sprache: Fach- vs. Laiensprache, Medienkanal, …) von Gerichten, Anwälten und anderen Rechtsakteuren in die Öffentlichkeit getragen, transparent und begründet werden und welche Rolle diese für Legitimationsprozesse des Rechtssystems spielen (können), ist nur unzureichend erforscht. Auch Erkenntnisse über Inhalte und Erfolge von strategischer Litigation-PR liegen nur im geringen Maße vor: Damit bleiben Fragen wie „Welche Kommunikationsstrategien werden während Gerichtsprozessen von juristischen Akteuren angewendet? und „Werden dabei kommunikationsethische Maximen (keine Vorverurteilung; Persönlichkeitsrechte involvierter Akteure respektieren) eingehalten?" bisher unbeantwortet.

Von besonderer Relevanz wäre dabei die Analyse und der Vergleich der Kommunikation unterschiedlicher juristischer Akteure (RichterInnen/Gerichte, (Staats)

Tab. 1 Zusammenfassung: Inhaltsanalysen zur Justizkommunikation & Litigation-PR. (Eigene Darstellung)

Zentrale Fragestellungen	Justizkommunikation: Welche Informationen werden von der Justiz über die Justiz vermittelt? Litigation-PR: Welche prozessstrategischen Merkmale weist die juristische Öffentlichkeitsarbeit auf?
Theoretische Perspektiven	Kaum bestimmbar aufgrund der geringen Anzahl empirischer Studien (u. a. Modell der PR nach Grunig, Determinationshypothese)
Methoden & Methodenkombinationen	Wenig standardisierte und nicht standardisierte Inhaltsanalysen, Schwerpunkt der Forschung liegt auf Befragungen von JustizpraktikerInnen
Hauptbefunde (basierend auf wenigen Einzelfallstudien)	*Informationen über Justiz, Gerichte und Prozesse:* • In der juristischen Medienarbeit werden überwiegend Gerichtsentscheide kommuniziert oder Prozesse angekündigt • Häufig werden dabei Prozesse mit spezifischen Deliktstypen und prominenter Beteiligung für die Medienarbeit ausgewählt *Stellenwert und die Inhalte von strategischer Justizkommunikation – Litigation-PR:* • Ungerechtfertigte identifizierende Medienmitteilungen von StaatsanwältInnen sind feststellbar • Litigation-PR auf Webseiten bietet Informationen zum Prozess, häufige Verwendung des „negativer Publicity entgegenwirken“ Frames
Forschungsdesiderata	Repräsentative, nicht-fallbezogene standardisierte und synchron sowie diachron vergleichende Inhaltsanalysen von juristischer Kommunikation (von Gerichten verschiedener Instanzen, AnwältInnen, anderen Prozessbeteiligten)

anwälte/anwältinnen) auf unterschiedlichen instanzlichen Ebenen. Bisherige Forschung hat meist den Fokus auf die Kommunikation oberster (Verfassungs)Gerichte gelegt. Ein Großteil relevanter juristischer Entscheide wird jedoch auf unteren Instanzen gefällt. Um das interdependente Verhältnis zwischen Medien und juristischer Öffentlichkeitsarbeit empirisch fassen zu können, wären zudem Studien mit Methodenkombinationen (Inhaltsanalyse von Medienarbeit und Medienberichterstattung, Befragung von Gerichtsreportern und juristischen Akteuren, Beobachtung von Gerichtsprozessen und Medienkonferenzen, …) erkenntnisversprechend. Auch wenn die Justiz als kommunikatonsträge gilt, so ist dennoch mit der weiteren Bedeutungs- und Reichweitenzunahme von sozialen Medien auch mit einer Partizipation von juristischen Akteuren auf diesen Plattformen zu rechnen (Warren 2014, S. 58). Auf diese Entwicklung sollte die Forschung reagieren und zunehmend auch diese Kommunikationsformen und deren Bedeutung für eine dialogorientierte und damit legitimierende Justizkommunikation berücksichtigen.

Literatur

Altenhain, K. (2016). Öffentlichkeit im Strafverfahren. Transparenz und Schutz der Verfahrensbeteiligten. *Neue Juristische Wochenschrift*, 37–41.

Baugut, P., Milch, A., & Moschini, M. (2019). ‚Richter sind ja auch nur Menschen.' Eine Analyse der Medienwirkungen auf Strafrichter/-innen unter besonderer Berücksichtigung der Onlinemedien. *MedienJournal – Zeitschrift für Medien- und Kommunikationsforschung*, 42(4), 7–32.

Becker-Toussaint, H. (2009). Die Bedeutung der Medien für die Staatsanwaltschaft. In I. Rode & M. Leipert (Hrsg.), *Das moderne Strafrecht in der Mediengesellschaft.* (S. 43-58). Berlin-Münster-Wien-Zürich-London: LIT Verlag.

Branahl, U. (2005) *Justizberichterstattung. Eine Einführung*. Wiesbaden: VS Verlag für Sozialwissenschaften.

Collins T. & Cooper C.A. (2015). Making the cases "real": Newspaper coverage of U.S. Supreme Court cases 1953–2004. *Political Communication*, 32(1), 23–42.

Davis R. (2011). *Justices and Journalists: The U.S. Supreme Court and the Media.* Cambridge: Cambridge University Press.

Delitz, J. (1986). Pressemitteilungen und Gerichtsberichterstattung. Eine empirische Studie zum Verhältnis von Öffentlichkeitsarbeit und Berichterstattung in Tageszeitungen. *Rundfunk und Fernsehen*, 36(4), 513–534.

Friedrichsen, G. (2007). Die Täter, die Opfer und die Öffentlichkeit. *Communicatio Socialis, 40*(1), 23-34.

Gies, L. (2005). The empire strikes back: Press judges and communication advisers in Dutch courts. *Journal of Law and Society*, *32* (3), 1-28.

Haggerty, J. F. (2003). *In the court of public opinion: Winning your case with public relations.* Hoboken, NJ: Wiley.

Hanske, P. & Lauber-Rönsberg A. (2013). Gerichtsberichterstattung zwischen Kommunikationsfreiheiten und Persönlichkeitsrechten. *Zeitschrift für Medien- und Urheberrecht*, S. 264–272.

Hassemer, W. (2009). Medien im Bundesverfassungsgericht. In I. Rode & M. Leipert (Hrsg.), *Das moderne Strafrecht in der Mediengesellschaft.* (S. 13-26). Berlin-Münster-Wien-Zürich-London: LIT Verlag.

Holtz-Bacha, C. (2017). Germany: The Federal Constitutional Court and the media. In R. Davis & D. Taras (Hrsg.), *Justices and Journalists. The global perspective.* (S. 101–118). Cambridge: Cambridge University Press.

Holzinger S. & Wolff U. (2009). *Im Namen der Öffentlichkeit. Litigation-PR als strategisches Instrument bei juristischen Auseinandersetzungen*. Gabler.

Heinrich I. (2012). Litigation-PR: Kommunikationsmanagement zum Schutz der Reputation im Gerichtssaal der öffentlichen Meinung. In: Rademacher L. & Schmitt-Geiger A. (Hrsg.) *Litigation-PR: Alles was Recht ist.* (S. 23-39) VS Verlag für Sozialwissenschaften, Wiesbaden.

Hitt, M.P & Searles K. (2018). Media Coverage and Public Approval of the U.S. Supreme Court, *Political Communication*, *35*(4), 566–586.

Johnston, J.& McGovern A. (2013). Communicating justice. A comparison of courts and police use of contemporary media. *International Journal of Communication, 7*, 1667–1687.

Kent, M. L., & Taylor, M. (2003). Maximizing media relations: A Web site checklist. *Public Relations Quarterly, 48,* 14–18.

Köhler, A. & Langen P. (2012): Der Fall Kachelmann zwischen öffentlicher und veröffentlichter Meinung: In dubio contra reo? In: Rademacher, L. & Schmitt-Geiger A. (Hrsg.): *Litigation-PR: Alles was Recht ist* (S. 187–202), VS Verlag für Sozialwissenschaften, Wiesbaden.

Koppenhöfer, B. (2012). Was darf Justiz? Was macht die Justiz? Welchen Einfluss haben die Medien? Ein Bericht aus der Praxis. In: Rademacher, L. & Schmitt-Geiger A. (Hrsg.): *Litigation-PR: Alles was Recht ist* (S. 279–292), VS Verlag für Sozialwissenschaften, Wiesbaden.

Kottkamp, J. (2015). *Öffentlichkeitsarbeit von Staatsanwaltschaften in der Mediengesellschaft.* Springer.

Meyer, P. (2019). Judicial public relations: Determinants of press release publication by constitutional courts. *Politics*.

Peleg A & Bogoch B (2014). Silence is no longer golden: Media, public relations and the judiciary in Israel. *Oñati Socio-Legal Series, 4*(4), 819–835.

Rademacher L. & Bühl A. (2012). Die Bedeutung von Litigation-PR im deutschen Rechtssystem: Ergebnisse einer Befragung deutscher Gerichte, Anwälte und Staatsanwaltschaften. In: Rademacher, L. & Schmitt-Geiger A. (Hrsg.): *Litigation-PR: Alles was Recht ist* (S. 243–253), VS Verlag für Sozialwissenschaften, Wiesbaden.

Rademacher, L. & Schmitt-Geiger A. (2012). *Litigation-PR: Alles was Recht ist: Zum systematischen Stand der strategischen Rechtskommunikation*. Springer VS.

Rath, C. (2015). Pressearbeit und Diskursmacht des Bundesverfassungsgerichts. In van Ooyen, R. C.., Möllers, M. H. W. (Hrsg.) *Handbuch Bundesverfassungsgericht im politischen System* (S. 403–412), 2nd ed. Springer VS.

Reber, B.H., Gower K.K.& Robinson J.A: (2006). The internet and litigation public relations, *Journal of Public Relations Research, 18*(1), 23-44.

Taras, D. (2017). Introduction. Judges and journalists and the spaces in between. In Taras, D. and Davis, R. (Hrsg.) *Justices and journalists: The global perspective.* Cambridge: Cambridge University Press.

Trüg, G. (2011): Medienarbeit der Strafjustiz – Möglichkeiten und Grenzen. *Neue Juristische Wochenschrift*, 1040–1045.

Scheu, A. M. (2019). Medienorientierung der Justiz. Strukturelle Anpassungen der deutschen Justiz an Anforderungen öffentlicher Aufmerksamkeit. *Medien Journal, 42*(4), 33–54.

Schmitt-Geiger A. (2014). Litigation-PR: Strategische Rechtskommunikation bei Unternehmenskrisen. In: Thießen A. (Hrsg.) *Handbuch Krisenmanagement* (S. 293-306). Springer VS, Wiesbaden

Staton, J. (2004). The impact of judicial public relations on newspaper coverage. Paper presented at the 2004 annual meeting of the American Political Science Association. 2004 Annual Meeting of the American Political Science Association, September 2–4, 2004, Chicago, Illinois. Abgerufen unter: http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.497.193&rep=rep1&type=pdf

Strother, L. (2017). How expected political and legal impact DriveMedia coverage of Supreme Court cases, *Political Communication, 34*(4), 571-589.

Warren, M. (2014). Open justice in the technological age. *Monash University Law Review*, *40*(1), 45–58.

Wagner, J. (1987). *Strafprozeßführung [sic] über Medien.* Baden-Baden: Nomos

Widmaier, U (2004). Gerechtigkeit von Justiz und Medien? *Neue Juristische Wochenschrift, 57*(7), 399-402.

Wohlrabe M. (2020). Mit Rechts- und Krisenthemen im Fokus der Öffentlichkeit – Worauf es bei überzeugender Litigation-PR ankommt. In: Ders.. (Hrsg.) *Litigation-PR*. Springer Gabler, Wiesbaden.

Dr. Franziska Oehmer-Pedrazzi is a senior lecturer and researcher at the University of Applied Sciences of the Grisons. She holds a PhD in Communication Science from the University of Zurich and a Bachelor in Law. Her research interests include mediatization (of law), political communication and digital media governance.





Content Analysis in the Research Field of Strategic Health Communication

Caroline von Samson-Himmelstjerna

1 Introduction

Health Communication refers to “any type of human communication whose content is concerned with health” (Rogers 1996, p. 15) while strategic communication can be defined as “the purposeful, normative use of communication functions and discourse processes by organizations to accomplish their missions, visions, and core values” (Heath et al. 2018, p. 1). The main characteristic of strategic communication is the communicator: an organization (in the broadest understanding) operating in the fields of management, marketing, public relations, technical communication, political communication, and information/social marketing campaigns (Hallahan et al. 2007). Strategic health communication can entail for example health campaigns and public service announcements (PSAs), public relations by health organizations and pharmaceutical companies, health policies and lobbying for health issues as well as advertisements of prescription and non-prescription drugs.

“Research concerning health communication is often problem-based, focusing on identifying, examining, and solving health care and health promotion issues” (Kreps 2014, p. 567). It has been conducted within a variety of disciplines, e.g., public health, nursing sciences, health psychology, economic sciences (social marketing), epidemiology, medicine and sociology. Based on the interdisciplinarity and different

C. von Samson-Himmelstjerna (✉)
Institut für Publizistik- und Kommunikationswissenschaft, Freie Universität Berlin, Berlin, Germany
E-Mail: caroline.samson@fu-berlin.de

F. Oehmer-Pedrazzi et al. (Hrsg.), *Standardisierte Inhaltsanalyse in der Kommunikationswissenschaft – Standardized Content Analysis in Communication Research*, https://doi.org/10.1007/978-3-658-36179-2_34

research traditions, health communication research investigates a broad scope of research questions and is based on a wide variety of theoretical concepts (Freimuth et al. 2006; Kim et al. 2010).

Since the 1970 s, (strategic) health communication has increasingly become an area of interest for communication scholars, emerging from the U.S. and expanding rapidly (Kreps 2014). In Asia and Europe, health communication is a younger but also a fast-growing discipline within communication sciences (for Asia: Paek et al. 2010b; for Europe: Schulz and Hartung 2010). There are strong intersections with research on risk communication, crisis communication (e.g., Vos and Buckner, 2016) and strategic science communication.

In strategic health communication research, two areas have been explored traditionally: patient-provider communication and mass media campaigns (Dutta 2018; for health communication in news/journalism, see part 2 of this handbook; for intersections e.g., Elbarazi et al. 2016).

2 Frequent Designs

Patient-provider communication is generally analyzed by discourse analysis due to its nature of interpersonal communication, using recordings (standardized observation, audio/video) and (quantitative/qualitative) surveys (Ha and Longnecker 2010). Hence, this contribution will focus on mass communication research instead of studies on micro level communication.

Research of mass media campaigns on health issues is mostly empirical and conducted via surveys/interviews (Freimuth et al. 2006; Hannawa et al. 2015) and/or quasi- or experimental designs (Freimuth et al. 2006; T. L. Thompson et al. 2014), using both qualitative and quantitative approaches (Kreps 2014), often focusing on effects (Hannawa et al. 2015). Although there is a larger body of quantitative research (Freimuth et al. 2006), the application of qualitative research designs is gaining ground. Also, mixed method designs combining two or more methods and both qualitative and quantitative approaches are more frequently used lately (Baumann et al. 2019; T. L. Thompson et al. 2014). Observational studies and physiological measurements (i.e., blood pressure, electrodermal activity, heart rate, facial expressions, etc.) in health campaign research are scarce (e.g., Suckfüll et al. 2014). However, there lies a high potential within and they are in demand (Baumann et al. 2019). Eye-tracking studies used to be rare but have been explored increasingly during the last ten years (King et al. 2019; e.g., Reifegerste et al. 2016).

While content analyses are far less common than surveys in health communication research in general, they have been conducted on a broad variety of topics in health communication (Freimuth et al. 2006; Hannawa et al. 2015; Tian and Robinson 2014). Three (interdependent) areas using this method frequently can be identified: health campaigns, health information, and pharmaceutical communication.

Health campaigns are, equivalent to public communication campaigns according to Atkin and Rice (2013), “purposive attempts to inform or influence behaviors in large audiences within a specified time period using an organized set of communication activities and featuring an array of mediated messages in multiple channels generally to produce noncommercial benefits to individuals and society” (p. 3) concerning health topics. These may include content analyses of health campaigns and PSAs on addictive behaviors, e.g., tobacco (Paek 2010a) and illicit drug use (Stephenson and Quick, 2005), prevention measures, e.g., HIV/AIDS (Freimuth et al. 1990), vaccination (Journault et al. 2020), road safety (DeJong and Atkin, 1995; Slater 1999), and cancer awareness (Diddi and Lundy 2017; Lenoir et al. 2017), family/child welfare, e.g., alcohol during pregnancy (Parackal, Parackal et al. 2017), and domestic violence (Reis et al. 2020), as well as general health promotion, e.g., nutrition (Zhang et al. 2017).

Strategic health information is characterized by an organizational communicator and may include off- and online content. In contrast to health campaigns, they either tend to be communicated through one channel only, are not defined by the dissemination within a limited period and/or are communication efforts of health organizations in acute health issues (e.g., Ebola virus) via social media. Content analysis is the most prevalent research method in this area of health communication (Beaunoyer et al. 2017; Chou et al. 2013), but the body of research is – esp. for offline-information – not overwhelmingly large. Offline health information includes for example information brochures/pamphlets in waiting areas of medical practices (e.g., Corcoran and Ahmad 2016; Kline and Mattson 2000), and may also be referred to as “small media”. Online health information includes for example websites on diseases/syndromes or healthy living (e.g., Baek and Yu 2009) by governmental or non-governmental organizations, health apps (e.g., Ming et al. 2020) and social media activities of health organizations (e.g., Dalrymple et al. 2016; Guidry et al. 2017; Vos and Buckner 2016; Young et al. 2018).

Pharmaceutical communication includes for example promotion of non-prescription drugs to the public (“over the counter medication”, OTC) and direct-to-consumer advertising of prescription drugs (DTCA; e.g., Alkazemi and van Stee 2020; Avery et al. 2012; Brownfield et al. 2004; Dan 2019; Frosch et al. 2007; Kaphingst et al. 2004). Content analysis has been a frequently used method since the beginning of empirical research on pharmaceutical advertising (Kopp and Bang 2000). In most countries, DTCA is banned and disease awareness advertisements (DAA) have recently become an alternative, but few studies have explored DAAs to date (Hall et al. 2009).

Often, the analyses employ a case study design, and are sometimes accompanied by social network analysis (e.g., Moukarzel et al. 2020; Schlichthorst et al. 2019). Automated content analysis/sentiment analysis seems fairly new in this field, but has been conducted also within health campaign research, usually to collect data on audience responses to strategic health communication measures (Ahmed et al. 2018; Chu et al. 2019a; Chu et al 2019; Gomes and Casais, 2018; Kessler and Schmidt-Weitmann 2019; Paracka1 et al. 2017).

3 Main Constructs

Content analysis research in strategic health communication is very diverse, maybe due to the interdisciplinarity, maybe because of the many theoretical constructs or, in some cases, the lack thereof (Freimuth et al. 2006; Hannawa et al. 2015; Kim et al. 2010). In few studies, the same or similar category systems or frames of references are being used. However, concentrating on research within the three strategic health communication fields identified above, the following constructs for health campaigns, health information and pharmaceutical communication can be found:

1. *emotional appeals within strategic message design:* In strategic health communication, message design analyses often explore emotional appeals. Fear appeals have been investigated most often, using the categories threat (seriousness, susceptibility) and efficacy (self-efficacy, response efficacy) in different contexts and deriving from various theories like protection motivation theory, the health belief model as well as the parallel response model: Smith (1997) looks at immunization intervention messages to examine the national usage of fear appeals using the categories above and adding the level of fear message quality (absence, statement or demonstration of fear appeal). She finds an almost equal amount of threat and efficacy appeals within the immunization messages, but a low message quality level of self-efficacy appeals which are considered crucial to the adoption of healthy behavior. Kline und Mattson (2000) analyze breast self-examination pamphlets, using like Smith (1997) the variables severity (called "seriousness" at Smith's) and susceptibility (i.e., general statistics and risk factors) for threat, and response efficacy and self-efficacy for efficacy appeals. They find an imbalance of threat to efficacy appeals with threat being emphasized, leading to a less persuasive message. Sheer und Chen (2008) expand the four-component-approach and add variables specific to Chinese cultural values to examine OTC-advertisement in regard to validity. Within the efficacy appeals, they discover "other efficacy" which refers to a third party and attest the four message design elements a "high degree of cross-cultural validity" (p. 950) resulting in an extended fear message model.
2. *ethical health messages:* Ethical visual and verbal message design elements are the research focus of Coleman und Major (2014). They analyze ethical frames (individual responsibility, harm reduction), ethical primes (stereotyping, i.e., gender primes and racial/cultural primes) and negative emotion frames, as well as the variables race/ethnicity of people portrayed and health issue within visual and verbal elements of PSAs. The major findings are AIDS/HIV as the main health issue, at least one ethically questionable visual or verbal frame or prime in almost all PSAs (97,3 %) with individual responsibility being the most prevalent frame (80 %), occurring mostly verbally and not visually. In contrast, gender stereotyping arose two times

more often in visual than in verbal frames. Racial and ethnical primes are low (8 %), but black people are depicted disproportionally often in AIDS/HIV PSAs compared to the actual infection/illness rates. A comparison of misleading information in OTC and DTC advertisements is conducted by Faerber und Kreling (2014), evaluating the truthfulness of the major claim. In DTCA, they find more objectively true claims, and fewer false claims than in OTC ads.

3. *balanced information on risk and benefit:* Balanced information on the benefits and risks of a medication are an FDA requirement for pharmaceutical advertisement in the United States of America. Therefore, Avery et al. (2012) focus on fair balance of risk information to benefit information in DTC antidepressant ads and discover an imbalance toward more attention on benefits than risks – but there is a notable improvement over time. Alkazemi und van Stee (2020) conduct a content analysis on eDTCA (prescription medication websites) investigating the categories visual elements, textual elements, social media, user-centric content and nature of the health condition. Results include a higher likeliness of a positive tone on websites of chronic conditions compared to acute health conditions websites. Surprisingly, and conflicting with results from previous studies, the readability of risk information ranks higher than benefit information. The disclosure of major risks in televised DTCA is the research focus of Sullivan et al. (2019). They evaluate general ad characteristics, risks presented during the major statement, understandability, quantitative information, audio characteristics as well as visual characteristics. Findings show for example an increase of the length of the major risk statements compared to previous research, which might lead to negative consequences for the recipients. About half of the ads use a positive image during the major risk statement, possibly distracting the audience from the risk information.
4. *linguistic and semantic characteristics:* Beaunoyer et al. (2017) offer an overview of seven tools to analyze the dimensions readability, emotional content, understandability and usability for online health information: They describe the SAM (Suitability Assessment of Materials), SAM+CAM (Suitability and Comprehensibility Assessment of Materials), BIDS (Bernier Instructional Design Scale), DISCERN, TEMPtED (Tool to Evaluate Materials Used in Patient Education), Health literacy INDEX, and PEMAT (Patient Education Material Assessment Tool). Understandability and usability are the most common dimensions to assess comprehensibility; they are intertwined as only an information understood can be an information of use (Beaunoyer et al. 2017). For example, using the SAM+CAM allows to examine suitability and comprehensibility of online health information. It includes the categories content, literacy demand, numeracy (numeric literacy), graphic material, layout/typography and learning stimulation/motivation (cf. Helitzer et al. 2009) and was developed to assess cervical cancer prevention materials. The results show a high reading level and a need to adjust ease of use and comprehensibility.

5. *other message design elements:* Strategic health messages contain apart from the message itself also information on the communicator, the audience and the disseminating channel (Bonfadelli and Friemel 2020; Tian and Robinson 2014). Journault et al. (2020) focused on the communicator of Lyme disease information websites, comparing different organization's accuracy of health information. They observe divergences and contradictory information as well as inaccurate information and suggest further research. Freimuth et al.'s (1990) content analysis of televised AIDS PSAs examines – amongst other objectives – specific message design to reach targeted audiences. Findings reveal that the messages aim rather at the general audience than the high-risk group. Guidry et al. (2017) look at the disseminating channel, comparing health organizations usage of Instagram and Twitter during the Ebola crisis. They attest Instagram a higher potential in health crisis communication than Twitter.

4 Research Desiderata

The overarching research goal for content analyses in strategic health communication is a commonly used standard of main constructs or category systems and a "catalogue" of message design elements (cf. Morrison et al. 2005). This catalogue would offer an alternative to self-reported effects, strengthen mixed-method approaches and serve as a research instrument (e.g., using physiological methods) as well as a campaign design tool. As this contribution has shown, there are many research gaps on the way to this goal. The lack of theoretical foundation in published health communication research (Freimuth et al. 2006; Hannawa et al. 2015; Kim et al 2010) might be a contributing factor to the missing "overarching framework" that would lead "into a coherent field of study" (Hannawa et al. 2014, p. 956), also enabling desired meta-analyses (Noar 2006).

One step on the way to a catalogue of message design elements are more theory-based studies. Furthermore, future research on strategic health communication should build on existing category systems – a goal we strive for with this handbook – and extend them. New analytic categories developed in close collaboration with existing ones to construct coding frames that could be applied to textual, visual and audio data would be desirable, also leading possibly to more automated content analyses and meta-analyses in the field. Ideally, codebooks will be made widely available (open access).

There are many gaps in message design research which might be narrowed by content analysis approaches instead of using surveys. For example, research on fear appeals – mostly using self-reports – has a longstanding tradition and still produces heterogeneous results, leading to no final answer on the question how to use fear appeals best in strategic health communication (Ruiter et al. 2014). These results may be explained by adding new aspects to the categories "threat" and "efficacy": There may be an underlying mix of emotional appeals involved, but other negative emotions and all positive emotions have been neglected within this research area; fear and its intensity

levels might be influenced by other message design elements like frame/primes or testimonials/celebrities (cf. Knoll and Matthes 2017). Intended and unintended effects of strategic health communication may be understood better by investigating intrinsic message contents (cf. Cho and Salmon 2007).

Comparisons between different communicators are surprisingly scarce, as the communicating organization is a key characteristic in strategic communication. Also, ethical issues are often overlooked in strategic health communication, esp. in campaigns, but are an important area of research as shown by Coleman and Major (2014). Cross-cultural validity (e.g., on fear appeals) is still a seldomly researched topic (cf. Baek and Yu 2009; Sheer and Chen 2008). Furthermore, strategic health communication research could benefit greatly from analyses of visual and audio components in addition to text as shown by Dan (2019), who investigated visual-verbal mismatches as a deception technique in DTCA. Also, DAA research is rare due to its novelty: More research is here urgently needed as DAA might be a gateway to lifting DTCA bans.

If we understand the depth and the subtle differences within the content itself, we might be able to understand effects in their entirety. Future research implementing content analyses with these goals and gaps in mind will hopefully contribute to a better understanding and application of strategic health communication.

References

Ahmed, W., Bath, P. A., Sbaffi, L., & Demartini, G. (2018). Measuring the effect of public health campaigns on Twitter: The case of World Autism Awareness Day. In G. Chowdhury, J. McLeod, V. Gillet, & P. Willett (Eds.), *Lecture Notes in Computer Science: Vol. 10766, Transforming digital worlds* (pp. 10–16). Cham: Springer International Publishing; Imprint: Springer.

Alkazemi, M. F., & van Stee, S. K. (2020). Electronic direct-to-consumer advertising of pharmaceuticals: An assessment of textual and visual content of websites. *Health Education Research*, *35*(2), 134–151. https://doi.org/10.1093/her/cyaa004

Atkin, C. K., & Rice, R. E. (2013). Theory and principles of public communication campaigns. In R. E. Rice & C. K. Atkin (Eds.), *Public communication campaigns* (pp. 3–19). Los Angeles: Sage.

Avery, R. J., Eisenberg, M., & Simon, K. I. (2012). Fair balance in direct-to-consumer antidepressant print and television advertising, 1995-2007. *Journal of Health Communication*, *17*(3), 250–277. https://doi.org/10.1080/10810730.2011.585698

Baek, T. H., & Yu, H. (2009). Online health promotion strategies and appeals in the USA and South Korea: A content analysis of weight-loss websites. *Asian Journal of Communication*, *19*(1), 18–38.

Baumann, E., Finne, E., & Ort, A. (2019). Methoden der Gesundheitskommunikation [Methods of health communication]. In C. Rossmann & M. R. Hastall (Eds.), *Handbuch der Gesundheitskommunikation. Kommunikationswissenschaftliche Perspektiven [Handbook of health communication. Communication science perspectives]* (1st ed., pp. 29–41). Wiesbaden: Springer Fachmedien Wiesbaden. https://doi.org/10.1007/978-3-658-10727-7_3

Beaunoyer, E., Arsenault, M., Lomanowska, A. M., & Guitton, M. J. (2017). Understanding online health information: Evaluation, tools, and strategies. *Patient Education and Counseling*, *100*(2), 183–189. https://doi.org/10.1016/j.pec.2016.08.028

Bonfadelli, H., & Friemel, T. N. (2020). *Kommunikationskampagnen im Gesundheitsbereich; Grundlagen und Anwendungen [Communication campaigns in the health sector: Basics and applications]*. Herbert von Halem Verlag.

Brownfield, E. D., Bernhardt, J. M., Phan, J. L., Williams, M. V., & Parker, R. M. (2004). Direct-to-consumer drug advertisements on network television: An exploration of quantity, frequency, and placement. *Journal of Health Communication*, *9*(6), 491–497.

Cho, H., & Salmon, C. T. (2007). Unintended effects of health communication campaigns. *Journal of Communication*, *57*(2), 293–317. https://doi.org/10.1111/j.1460-2466.2007.00344.x

Chou, W. S., Prestin, A., Lyons, C., & Wen, K. (2013). Web 2.0 for health promotion: Reviewing the current evidence. *American Journal of Public Health*, *103*(1), e9–18. https://doi.org/10.2105/AJPH.2012.301071

Chu, K.-H., Allem, J.-P., Unger, J. B., Cruz, T. B., Akbarpour, M., & Kirkpatrick, M. G. (2019). Strategies to find audience segments on Twitter for e-cigarette education campaigns. *Addictive Behaviors*, *91*, 222–226. https://doi.org/10.1016/j.addbeh.2018.11.015

Chu, K.-H., Colditz, J., Malik, M., Yates, T., & Primack, B. (2019). Identifying key target audiences for public health campaigns: Leveraging machine learning in the case of hookah tobacco smoking. *Journal of Medical Internet Research*, *21*(7), e12443.

Coleman, R., & Major, L. H. (2014). Ethical health communication: A content analysis of predominant frames and primes in public service announcements. *Journal of Mass Media Ethics*, *29*(2), 91–107.

Corcoran, N., & Ahmad, F. (2016). The readability and suitability of sexual health promotion leaflets. *Patient Education and Counseling*, *99*(2), 284–286. https://doi.org/10.1016/j.pec.2015.09.003

Dalrymple, K. E., Young, R., & Tully, M. (2016). "Facts, not fear": Negotiating uncertainty on social media during the 2014 Ebola crisis. *Science Communication*, *38*(4), 442–467. https://doi.org/10.1177/1075547016655546

Dan, V. (2019). Audiences in the dark: Deception in pharmaceutical advertising through verbal–visual mismatches. In *The Palgrave handbook of deceptive communication* (pp. 839–855). Palgrave Macmillan, Cham. https://doi.org/10.1007/978-3-319-96334-1_43

DeJong, W., & Atkin, C. K. (1995). A review of national television PSA campaigns for preventing alcohol-impaired driving, 1987-1992. *Journal of Public Health Policy*, *16*(1), 59.

Diddi, P., & Lundy, L. K. (2017). Organizational Twitter use: Content analysis of tweets during Breast Cancer Awareness Month. *Journal of Health Communication*, *22*(3), 243–253. https://doi.org/10.1080/10810730.2016.1266716

Dutta, M. J. [M. J.] (2018). Health communication. In *The international encyclopedia of strategic communication* (pp. 1–13). American Cancer Society. https://doi.org/10.1002/9781119010722.iesc0082

Elbarazi, I., Raheel, H., Cummings, K., & Loney, T. (2016). A content analysis of Arabic and English newspapers before, during, and after the Human Papillomavirus vaccination campaign in the United Arab Emirates. *Frontiers in Public Health*, *4*, 176.

Faerber, A. E., & Kreling, D. H. (2014). Content analysis of false and misleading claims in television advertising for prescription and nonprescription drugs. *Journal of General Internal Medicine*, *29*(1), 110–118. https://doi.org/10.1007/s11606-013-2604-0

Freimuth, V. S., Hammond, S. L., Edgar, T., & Monahan, J. L. (1990). Reaching those at risk. *Communication Research*, *17*(6), 775–791.

Freimuth, V. S., Massett, H. A., & Meltzer, W. (2006). A descriptive analysis of 10 years of research published in the Journal of Health Communication. *Journal of Health Communication*, *11*(1), 11–20.

Frosch, D. L., Krueger, P. M., Hornik, R. C., Cronholm, P. F., & Barg, F. K. (2007). Creating demand for prescription drugs: A content analysis of television direct-to-consumer advertising. *The Annals of Family Medicine*, *5*(1), 6–13.

Gomes, R. F., & Casais, B. (2018). Feelings generated by threat appeals in social marketing: text and emoji analysis of user reactions to anorexia nervosa campaigns in social media. *International Review on Public and Nonprofit Marketing*, *15*(4), 591–607.

Guidry, J. P., Jin, Y., Orr, C. A., Messner, M., & Meganck, S. (2017). Ebola on Instagram and Twitter: How health organizations address the health crisis in their social media engagement. *Public Relations Review*, *43*(3), 477–486. https://doi.org/10.1016/j.pubrev.2017.04.009

Ha, J. F., & Longnecker, N. (2010). Doctor-patient communication: A review. *Ochsner Journal*, *10*(1), 38–43.

Hall, D. V., Jones, S. C., & Iverson, D. C. (2009). Content analysis of disease awareness advertisements in popular Australian women's magazines. *Medical Journal of Australia*, *191*(11-12), 625–629.

Hallahan, K., Holtzhausen, D., van Ruler, B., Verčič, D., & Sriramesh, K. (2007). Defining strategic communication. *International Journal of Strategic Communication*, *1*(1), 3–35.

Hannawa, A. F., García-Jiménez, L., Candrian, C., Rossmann, C., & Schulz, P. J. (2015). Identifying the field of health communication. *Journal of Health Communication*, *20*(5), 521–530. https://doi.org/10.1080/10810730.2014.999891

Hannawa, A. F., Kreps, G. L., Paek, H.-J., Schulz, P. J., Smith, S., & Street, R. L. (2014). Emerging issues and future directions of the field of health communication. *Health Communication*, *29*(10), 955–961. https://doi.org/10.1080/10410236.2013.814959

Heath, R. L., Johansen, W., Hallahan, K., Steyn, B., Falkheimer, J., & Raupp, J. J. C. (2018). Strategic communication. In *The international encyclopedia of strategic communication* (pp. 1–24). American Cancer Society. https://doi.org/10.1002/9781119010722.iesc0172

Helitzer, D., Hollis, C., Cotner, J., & Oestreicher, N. (2009). Health literacy demands of written health information materials: An assessment of cervical cancer prevention materials. *Cancer Control: Journal of the Moffitt Cancer Center*, *16*(1), 70–78.

Journault, A.-A., Richard, L., & Aenishaenslin, C. (2020). Lyme disease prevention: A content analysis of Canadian patient group and government websites. *Zoonoses and Public Health*, *67*(2), 177–185. https://doi.org/10.1111/zph.12669

Kaphingst, K. A., DeJong, W., Rudd, R. E., & Daltroy, L. H. (2004). A content analysis of direct-to-consumer television prescription drug advertisements. *Journal of Health Communication*, *9*(6), 515–528.

Kessler, S. H., & Schmidt-Weitmann, S. (2019). Diseases and emotions: an automated content analysis of health narratives in inquiries to an online health consultation service. *Health Communication*, 1–10. https://doi.org/10.1080/10410236.2019.1673950.

Kim, J.-N., Park, S.-C., Yoo, S.-W., & Shen, H. (2010). Mapping health communication scholarship: Breadth, depth, and agenda of published research in health communication. *Health Communication*, *25*(6-7), 487–503.

King, A. J., Bol, N., Cummins, R. G., & John, K. K. (2019). Improving visual behavior research in communication science: an overview, review, and reporting recommendations for using eye-tracking methods. *Communication Methods and Measures*, *13*(3), 149–177. https://doi.org/10.1080/19312458.2018.1558194

Kline, K. N., & Mattson, M. (2000). Breast self-examination pamphlets: A content analysis grounded in fear appeal research. *Health Communication*, *12*(1), 1–21.

Knoll, J., & Matthes, J. (2017). The effectiveness of celebrity endorsements: A meta-analysis. *Journal of the Academy of Marketing Science*, *45*(1), 55–75. https://doi.org/10.1007/s11747-016-0503-8

Kopp, S. W., & Bang, H. K. (2000). Benefit and risk information in prescription drug advertising: review of empirical studies and marketing implications. *Health Marketing Quarterly, 17*(3), 39-56.

Kreps, G. L. (2014). Health communication, history of. In T. L. Thompson (Ed.), *Encyclopedia of health communication* (pp. 567–571). Thousand Oaks, CA: SAGE Reference.

Lenoir, P., Moulahi, B., Azé, J., Bringay, S., Mercier, G., & Carbonnel, F. (2017). Raising awareness about cervical cancer using Twitter: Content analysis of the 2015 #SmearForSmear Campaign. *Journal of Medical Internet Research*, *19*(10), e344.

Ming, L. C., Untong, N., Aliudin, N. A., Osili, N., Kifli, N., Tan, C. S., Goh, H. P. (2020). Mobile health apps on COVID-19 launched in the early days of the pandemic: Content analysis and review. *JMIR MHealth and UHealth*, *8*(9), e19796.

Morrison, F. P., Kukafka, R., & Johnson, S. B. (2005). Analyzing the structure and content of public health messages. *AMIA Annual Symposium Proceedings*, *2005*, 540–544.

Moukarzel, S., Rehm, M., & Daly, A. J. (2020). Breastfeeding promotion on Twitter: A social network and content analysis approach. *Maternal & Child Nutrition*, *16*(4), e13053. https://doi.org/10.1111/mcn.13053

Noar, S. M. (2006). In pursuit of cumulative knowledge in health communication: The role of meta-analysis. *Health Communication*, *20*(2), 169–175.

Paek, H.-J., Kim, K., & Hove, T. (2010). Content analysis of antismoking videos on YouTube: Message sensation value, message appeals, and their relationships with viewer responses. *Health Education Research*, *25*(6), 1085–1099. https://doi.org/10.1093/her/cyq063

Paek, H.-J., Lee, A. L., Jeong, S.-H., Wang, J., & Dutta, M. J. (2010). The emerging landscape of health communication in Asia: Theoretical contributions, methodological questions, and applied collaborations. *Health Communication*, *25*(6-7), 552–559.

Parackal, M., Parackal, S., Eusebius, S., & Mather, D. (2017). The use of Facebook advertising for communicating public health messages: A campaign against drinking during pregnancy in New Zealand. *JMIR Public Health and Surveillance*, *3*(3), e49.

Reifegerste, D., Kessler, S. H., & Guenther, L. (2016). Bewegt durch Bilder? Der Einfluss von Aufmerksamkeit und Hintergrundmotiv [Moved by pictures? The influence of attention and background motif]. In A.-L. Camerini, R. Ludolph, & F. Rothenfluh (Eds.), *Reihe Medien + Gesundheit: Band 13, Gesundheitskommunikation im Spannungsfeld zwischen Theorie und Praxis [Health communication in the area of tension between theory and practice]* (1st ed., pp. 131–141). Baden-Baden: Nomos

Reis, E., Arriaga, P., Moleiro, C., & Hospital, X. (2020). Pictorial campaigns on intimate partner violence focusing on victimized men: A systematic content analysis. *Frontiers in Psychology*, *11*, 1450. https://doi.org/10.3389/fpsyg.2020.01450

Rogers, E. M. (1996). The field of health communication today: An up-to-date report. *Journal of Health Communication*, *1*(1), 15–23.

Ruiter, R. A. C., Kessels, L. T. E., Peters, G.-J. Y., & Kok, G. (2014). Sixty years of fear appeal research: Current state of the evidence. *International Journal of Psychology*, *49*(2), 63–70. https://doi.org/10.1002/ijop.12042

Schlichthorst, M., King, K., Reifels, L., Phelps, A., & Pirkis, J. (2019). Using social media networks to engage men in conversations on masculinity and suicide: Content analysis of man up Facebook campaign data. *Social Media + Society*, *5*(4), 205630511988001.

Schulz, P. J., & Hartung, U. (2010). Health communication research in Europe: An emerging field. *Health Communication*, *25*(6-7), 548–551.

Sheer, V. C., & Chen, L. (2008). Intrinsic characteristics of health-related fear appeals from Chinese print OTC ads: implications for fear message construction. *International Journal of Communication*, 936–958.

Slater, M. D. (1999). Drinking and driving PSAs: a content analysis of behavioral influence strategies. Journal of Alcohol and Drug Education, 44(3), 68–81. *Journal of Alcohol and Drug Education*, *44*(3), 68.

Smith, S. L. (1997). The effective use of fear appeals in persuasive immunization: An analysis of national immunization intervention messages. *Journal of Applied Communication Research*, *25*(4), 264–292.

Stephenson, M. T., & Quick, B. L. (2005). Parent ads in the National Youth Anti-Drug Media Campaign. *Journal of Health Communication*, *10*(8), 701–710.

Suckfüll, M., Schmidt, J., & Reuter, M. (2014). Emotionen in der Präventionskommunikation [Emotions in prevention communication]. In E. Baumann, M. R. Hastall, C. Rossmann, & A. E. Sowka (Eds.), *Reihe Medien + Gesundheit: Vol. 9. Gesundheitskommunikation als Forschungsfeld der Kommunikations- und Medienwissenschaft [Health communication as a research area of communication science and media studies]* (1st ed., pp. 78–91). Baden-Baden: Nomos.

Sullivan, H. W., Aikin, K. J., & Poehlman, J. (2019). Communicating risk information in direct-to-consumer prescription drug television ads: A content analysis. *Health Communication*, *34*(2), 212–219. https://doi.org/10.1080/10410236.2017.1399509

Thompson, T. L., Cusella, L. P., & Southwell, B. G. (2014). Method matters. In B. B. Whaley (Ed.), *Research methods in health communication: Principles and application* (pp. 4–17). New York, NY: Routledge.

Tian, Y., & Robinson, J. D. (2014). Content analysis of health communication. In B. B. Whaley (Ed.), *Research methods in health communication: Principles and application* (pp. 190–212). New York, NY: Routledge.

Vos, S. C., & Buckner, M. M. (2016). Social media messages in an emerging health crisis: Tweeting bird flu. *Journal of Health Communication*, *21*(3), 301–308. https://doi.org/10.1080/10810730.2015.1064495

Young, R., Tully, M., & Dalrymple, K. E. (2018). #Engagement: use of Twitter chats to construct nominal participatory spaces during health crises. *Information, Communication & Society*, *21*(4), 499–515. https://doi.org/10.1080/1369118X.2017.1301518

Zhang, X., Baker, K., Pember, S., & Bissell, K. (2017). Persuading me to eat healthy: A content analysis of YouTube public service announcements grounded in the health belief model. *Southern Communication Journal*, *82*(1), 38–51.

Caroline von Samson-Himmelstjerna is a research associate at the Institute for Media and Communication Studies, Freie Universität Berlin. Her areas of interest in research and teaching are health and risk communication, strategic communication/campaigns, emotional appeals, and empowerment.



Content Analysis in the Research Field of Science Communication

Nina Wicke

1 Introduction

Science communication can be understood as all forms of communication focusing on scientific knowledge and scientific work, both within and outside institutionalized science, including its production, content, use and effects. It encompasses internal and external communication, science journalism and public relations and is thus directed to and by scientists as well as non-scientists, using one-way and dialogue-oriented forms to communicate between science and the public sphere (Bonfadelli et al. 2017; Bubela et al. 2009; Kahan et al. 2017; Schäfer et al. 2015). Based on these definitions, various types of communicators are involved in science communication; however, not all of them share the same objectives. For some communicators, science communication is of high societal and individual relevance, aimed to foster greater public understanding of and engagement with science and scientific methods (Bubela et al. 2009; Fischhoff and Scheufele, 2013). Science communication informs citizens and provides access to scientific issues and knowledge, enables them to participate, and empowers them to form opinions that provide the basis for individual and political decisions (Burns et al. 2003). For some communicators, another important objective of science communication is to shape acceptance and create a relationship of trust (Sturgis 2014; Weingart and Guenther 2016). Moreover, some science communicators aim to contribute to the reputation management of scientists and scientific institutions and to strengthen the legitimation

N. Wicke (✉)
Institut für Kommunikationswissenschaft (IfKW), TU Braunschweig,
Braunschweig, Germany
E-Mail: n.wicke@tu-braunschweig.de

F. Oehmer-Pedrazzi et al. (Hrsg.), *Standardisierte Inhaltsanalyse in der Kommunikationswissenschaft – Standardized Content Analysis in Communication Research,* https://doi.org/10.1007/978-3-658-36179-2_35

of publicly provided (financial) resources for science and research (acatech – Deutsche Akademie der Technikwissenschaften, Nationale Akademie der Wissenschaften Leopoldina, Union der deutschen Akademien der Wissenschaften 2017; Gantenberg 2018; Pfenning 2012; Siggener Kreis 2013; Weitze and Heckl 2016). The objectives of science communication vary because various stakeholder groups and actors are involved; and they pursue individual goals with their respective involvement. The main communicators of science are scientists themselves, (science) journalists as well as public relations departments of universities and scientific institutions. Furthermore, there are "alternative" science communicators (Maeseele 2014), such as non-governmental organizations (NGOs), activist organizations, think tanks and laypeople interested in science. Often, they are considered to be knowledgeable experts in the scientific issues that they are advocating (Fähnrich 2018a).

To improve our understanding of how science is communicated to the public is of great importance, given its impact on people's awareness, perceptions and understanding of scientific issues[1]. Moreover, the content communicated influences people's perception of scientific authority, for example of scientists' competence and trustworthiness, and therefore their relationship of trust (e.g. Morton et al. 2011; Visschers 2018). However, science communication varies across different communicators and thus, the present article provides an overview of content analysis of the main communicators of science communication.

2 Common Research Designs and Combinations of Methods

Overall, research on the communicators of science is scarce. Especially organizational and alternative science communicators have hardly been addressed by research (Fähnrich 2018b; Kessler et al. 2020; Schäfer et al. 2019). Therefore, empirical data on the content of their communication is still widely missing. Previous studies on the content disseminated by science communicators focus on different analytical levels: from the communication of individuals such as scientists (micro-level) to the communication of universities, scientific institutions and organizations (meso-level) and to science journalism in general (macro-level) (Schäfer et al. 2019). The vast majority of those studies uses as a research design standardized content analysis. Among those are also input–output studies of scientific articles, university press releases and news stories (Sumner et al. 2014). Some of them have combined content analysis and cluster analysis to identify communication types (Chapleo et al. 2011; Metag and Schäfer 2017). Moreover, combinations of content analysis and surveys have been conducted (e.g. Hara et al. 2019); however, studies on science communication communicators using a combination of methods are scarce.

[1] The chapter "Content Analysis in the Research Field of Science Coverage" by Kessler and Schäfer in this handbook provides an overview of media content analysis in science communication research on news especially as journalistic content.

Only a few studies use qualitative methods such as critical discourse analysis to analyze, for instance, Facebook and Twitter posts or promotional videos on university websites (e.g. Bélanger et al. 2013; Gottschall and Saltmarsh 2016; Zhang and O'Halloran 2013). Some content analyses are based on a combination of quantitative and qualitative techniques, for example, iterative close reading of content (e.g. Kouper 2010; Lederbogen and Trebbe 2003).

Recently, studies have also relied on computational content analysis. For instance, Walter et al. (2019) conducted a Twitter network analysis and automated content analysis of scientists' tweets using the discourse on climate change as a case study.

3 Main Constructs Employed in Content Analyses of Science Communicators' Communication

Existing research on the communication of science communicators considers different research subjects and issues. The media coverage of scientific issues and thus what (science) journalists communicate about science receives a lot of scholarly attention (see the chapters of Kessler & Schäfer and of Mahl & Guenther in this handbook). Moreover, in the field of external scientific communication, online media and social media have become increasingly important in recent years. This is reflected in the research literature, studies have analyzed more and more science-related online communication (Schäfer 2017). First of all, these studies show that scientific actors and institutions use online communication for external communication less intensive than other actors, at least in German-speaking countries (Lederbogen and Trebbe 2003; Waters et al., 2009). Non-scientific stakeholders such as NGOs are more active. They have intensified their online communication and often influence debates on political and controversial scientific issues (Askanius and Uldam 2011; Greenberg et al. 2011; Jun 2011).

In the following, the state of the art of content analyses of three main science communicators – 1) scientists, 2) universities and scientific institutions and 3) non-scientific, alternative science communicators – will be presented:

3.1 Scientists as Science Communicators

Scientists play a major role as sources of media reporting (Lehmkuhl and Leidecker-Sandmann 2019). For instance, the German print media coverage of scientific issues often has a strong scientific character with a focus on statements of scientific experts (Summ and Volpers, 2016). They usually provide background information, opinions, and interpretations of (non-)scientific issues (Albæk 2011), even if they have not published any or only a few thematically relevant publications regarding the reported issue (Lehmkuhl and Leidecker-Sandmann 2019). In recent years, the role of scientists as external communicators has become even more important, which has been widely

acknowledged (Dudo and Besley 2016; Herrmann-Giovanelli 2013; Peters et al. 2008; Peters 2013; Schäfer et al. 2015). Especially online communication such as blogs or social media platforms enable scientists to communicate directly to the public (Brossard 2013). For instance, how scientists engage and interact on Twitter (Jahng and Lee 2018; Jünger and Fähnrich 2019; Walter et al. 2019) and on Reddit (Hara et al. 2019) has been investigated by content analyses. Studies have also focused on event- and topic-related communicative behavior (Jahng and Lee 2018; Walter et al. 2019) as well as on the communication of scientists of a certain discipline (communication science: Jünger and Fähnrich 2019; climate science: Liu et al. 2015). The content and its communicative function, the degree and types of **the engagement** of the scientists, the relationship between scientists and users as well as the use of platform specific features such as hashtags were often analyzed. Findings indicate that scientists communicate mainly in a one-way direction and do not create dialogue with the public, but reach various actors beyond academic networks (Jahng & Lee 2018; Jünger and Fähnrich 2019; Walter et al. 2019).

Another online platform for mediating science are science blogs. They can be used for different kinds of exchange of scientific information and these blogs tend to be used by scholars to position themselves (Ashlin and Ladle 2006; Luzón 2009; Mahrt and Puschmann 2014). Studies examining the content of those blogs consider its discipline, topics, types of posts and comments, distributed information, linguistic presentation, structural features, links and genre (Kouper 2010; Luzón 2009; Mahrt and Puschmann 2014; Shema 2012) as well as interactions between authors and readers such as the number of comments to a blog post (Kouper 2010; Mahrt and Puschmann 2014). These studies have shown that blog authors communicate in a comprehensible way. They approach their topics in an everyday style and alternate explanations with personal opinions as well as humorous remarks, thus readers without a scientific background can understand the content (Kouper 2010; Mahrt and Puschmann 2014).

A further scientist-related but interpersonal type of communication is informal scholarly communication, which, among others, is used for social exchange among scientists and for the development of ideas and cooperation (Lüthje 2017). So far, scientists' interpersonal communication has mainly been investigated by survey studies focusing on their media usage behavior. Content analyses of their communication are scarce (e.g. Goodwin et al. 2014). This may be due to the fact that informal scholarly communication often takes place in communication channels which are available to a restricted audience only.

3.2 Universities and Scientific Institutions as Science Communicators

The paradigm shift in the discussion about the relationship between science and the public – a departure from the assumption of an information and competence deficit

among citizens, the so-called “deficit model” (Bauer 2016; Bucchi 2008), towards dialogical approaches in the sense of a public engagement with science (Durant 1999; Irwin and Wynne 1996) – has brought strategic science communication of professional science communicators such as media offices and public relations departments of universities into focus (Fähnrich 2018b). In recent years, universities are put under ongoing and increasing pressure to publicly legitimize their existence and to garner public support for their public base funding as well as to raise additional third-party funding (Marcinkowski et al. 2013; Metag and Schäfer 2017). As a reaction, their communication activities have increased (Entradas and Bauer 2016).

Content analyses focusing on the external communication of scientific institutions investigate how the PR activities in the form of press releases have changed over time and by which scientific disciplines or research areas institutional science PR is dominated (Serong et al. 2017). Furthermore, studies examined the representation of the research topic in both press releases and scientific journal articles and its subsequent news coverage to investigate the accuracy of science reporting (Brechman et al. 2009, 2011; Bubela and Caulfield 2004; Sumner et al. 2014, 2016; Winters et al. 2019; Yavchitz et al. 2012). The analyses of press releases’ content and the content presented in subsequent press coverage consider claims and language, for example based on criteria such as presence or absence of qualifying information, overinterpretation of partial or preliminary findings, overgeneralization or simplification and contradiction (Brechman et al. 2009). Those content analyses demonstrated that exaggeration in news stories is related to exaggeration in press releases (Sumner et al. 2014). Furthermore, the comparison of press releases and corresponding news stories shows that the information is often inconsistent and important measures of a scientific study such as funding and study limitations were omitted to a very large extent (Brechman et al. 2011; Winters et al. 2019).

Another possibility for universities and organizations to disseminate their messages directly without journalists as ‘gatekeepers’, and to address key stakeholders, among those especially (prospective) students, is online communication (Metag and Schäfer 2017, 2019). However, the online communication of scientific institutions and universities has received little attention in the research literature so far (Metag and Schäfer 2019). A popular research object in this context are websites. Their characteristics **hypertextuality, multimediality and interactivity** (Metag and Schäfer 2017), as well as **multilingualism** (Bal and Sharik 2019; Bozyigit and Akkan 2014; Chapleo et al. 2011; Lederbogen and Trebbe 2003), for example, are analyzed. Furthermore, the content of the websites (Bal and Sharik 2019; Bozyigit and Akkan 2014; Carlos and Rodrigues 2012; Chapleo et al. 2011; Else and Crookes 2015; Gottschall and Saltmarsh 2016; Greenwood 2012; Kang and Norton 2006; Lederbogen and Trebbe 2003; Metag and Schäfer 2017; Zhang and O'Halloran 2013), its portrayal of gender and ethnic diversity (Bal and Sharik 2019) and the extent to which they are information- and dialogue-oriented has been investigated (Gordon and Berhow 2009; McAllister-Spooner and Kent 2009; Shadinger 2013). Metag

and Schäfer (2017) state that universities' online communication is influenced by their structural characteristics such as the size of the university. Further findings indicate that teaching and research issues are often well communicated but other aspects like social responsibility are less visible (Chapleo et al. 2011; Else and Crookes 2015).

More recent publications focus on the social media communication of universities and scientific institutions, mainly on the social network platforms Facebook and Twitter (Bélanger et al. 2013; Forkosh-Baruch and Hershkovitz 2012; Lee and VanDyke 2015; Lee et al. 2017; Linvill et al. 2012; Lovari and Giglietto 2012; Peruta and Shields 2016; Su et al. 2017). Research has examined social media practices as well as strategies and tools used for marketing and institutional branding (Bélanger et al. 2013; Gottschall and Saltmarsh 2016; Linvill et al. 2015; Lovari and Giglietto 2012). Common categories of analyses include community-related aspects such as the number of likes and friends/subscribers as well as the content of the postings (Bélanger et al. 2013; Linvill et al. 2012, 2015). Similar to the website analyses, the interaction with followers is often analyzed regarding its informational and dialogical potential (Lee et al. 2017; Lee and VanDyke 2015; Su et al. 2017). The types of conversations and discussions universities mainly initiate are examined. For instance, attributes for posts and comments such as distribution of post types (photos, links, text statuses and videos), post and comment text, number of likes, number of comments, number of shares, number of hashtags, replies to previous comments etc. are measured (Forkosh-Baruch and Hershkovitz 2012; Lee et al., 2017; Lee and VanDyke 2015; Lovari and Giglietto 2012; Metag and Schäfer 2017; Peruta and Shields 2016; Su et al. 2017). Findings indicate that new media platforms are used for information dissemination rather than engagement (e.g. Lee et al. 2017; Lee and VanDyke 2015).

There is pressure to be more user-centered in their communication approaches and strategies not only for scientific institutions, but also for science museums. So far, little is known about how museums are using the internet to engage their audiences and if they are using it to support knowledge creation, information dissemination, informal education, public engagement and participation with science (Capriotti et al. 2016; Capriotti and Pardo Kuklinski 2012; Jensen 2013; Kelly 2010). For instance, through a quantitative content analysis, basic questions about how science museums are using Instagram have been investigated by Jarreau et al. (2019). Previous studies revealed that most science and natural history museums are using websites and social media to promote in a traditional, one-way messaging their public-facing exhibits and activities and thus miss opportunities to raise awareness of the inner workings of the museum (Capriotti et al 2016; Capriotti and Pardo Kuklinski 2012; Jarreau et al. 2019; Jensen 2013; Kelly 2010).

3.3 Non-scientific, Alternative Science Communicators

Non-scientific science communicators, such as nonprofit and non-governmental organizations, are taking advantage of the social networking popularity as well, for example to reach out to partners across countries and to enhance collaborations (Taylor et al. 2001; Yang and Taylor 2010). Similar to other science communicators' communication, their websites and social media profiles are common research objects. Accordingly, **the websites' design and public relations features** for communicating (environmental) information and relationship-building are explored. For instance, it was examined how organizations utilize their websites as a tool for media relations, donor relations, and volunteer relations (Jun 2011; Yeon et al. 2007). Further dimensions of these content analyses are the ease of interaction, the usefulness of information to the members and volunteers, to the general public and to the media as well as conservation of visitors, generation of return visits, dialogic loop, and mission statements (Reber and Kim 2006; Taylor et al. 2001; Yang and Taylor 2010). They are also taken into account to analyze the organizations' social networking relationships with their stakeholders and their **dialogical strategies** regarding the use of social media platforms such as Twitter and Facebook (Bortree and Seltzer 2009; Cho et al. 2014; Waters et al. 2009; Waters and Jamal 2011). To provide information on nonprofit organizations' Twitter usage, their use of specific communication tools, including following behavior, hyperlinks, hashtags, public messages, multimedia files, and retweets (Lovejoy et al. 2012) as well as additional data, such as number of people following the account and number of tweets, were recorded (Waters and Jamal 2011). To measure organizational message strategies and PR activities on Facebook, organizational disclosure, information dissemination, and involvement (Waters et al. 2009) and the numbers of likes, shares and comments on the postings were coded, for example (Cho et al. 2014).

Compared to analyses of the communication of non-profit organizations, the communication of think tanks has been overlooked yet. For instance, a study of Castillo-Esparcia et al. (2015) examines and assesses the performance of think tanks in social media, measuring the dimensions visibility, reach, interactivity and engagement.

Findings reveal that NGO websites are mostly used for educational rather than activation communication (Yang and Taylor 2010). Advocacy groups may be missing opportunities to respond to stakeholder feedback and information needs (Bortree and Seltzer 2009). Dialogic features are rather available for the general public than for journalists (Reber and Kim 2006).

4 Research Desiderata

Although research on science communication has grown internationally in importance and in numbers of publications during the last years which indicates an institutionalization of the field (Kessler et al. 2020; Rauchfleisch and Schäfer 2018), the communication of science communicators still offers great potential for future research.

Organizational communication from universities or scientific institutions is increasing and alternative actors like environmental activists are becoming important science communicators, but have not yet received much attention (Entradas and Bauer 2016; Fähnrich 2018a; Schäfer et al. 2019). Furthermore, studies on the interactions among different science communicators, for example between scientists and media officers of universities, could enrich the research literature. Such research would contribute to the knowledge about internal communication and thus about communicative processes of knowledge production and dissemination, which has so far been hardly addressed from both practice and research (Buchholz 2019).

Another gap which requires more scholarly attention is university communication in general (Metag and Schäfer 2017). Studies often examine only certain communication channels such as the website or social media platforms used by institutional science communicators and do not consider underlying communication concepts and their aims (Lovari and Giglietto 2012). Usually, in their analyses they focus on a specific point in time. Therefore, there are hardly any long-term analyses which could identify changes in university communication (Zhang and O'Halloran 2013).

Moreover, comparative studies across countries have not been conducted yet (except: Metag and Schäfer 2017). In general, the content analyses of the communication of universities and scientific institutions focus on the practical applicability of their findings and often miss theoretical foundations. They can only be generalized to a limited extent (Metag and Schäfer 2019). Therefore, Metag und Schäfer (2019) suggest to combine content analysis with structural data of the universities and survey data of communication departments to explore aims, concepts and developments more deeply. Overall, the research field would also profit from studies which do not only analyze the content, but also its effects on recipients.

Another future challenge is to research new forms of science communication, such as science museums, science slams, science festivals or science podcasts. They have become a popular, low-threshold form through which to engage the public with science and scientists (MacKenzie 2019; Ocobock and Hawley 2020). To better understand their efficacy and their effects, for instance regarding enhancements on public understanding and knowledge, scientific literacy or perception of science, the communicated content and the communication style within such formats should be taken into account.

Content analyses on how science communicators – the key players in bridging science and the public – communicate about science may help to develop appropriate ways and

evaluation methods of effective science communication, and therefore studies on science communicators deserve further attention in future research.

Relevant Variables in DOCA – Database of Variables for Content Analysis

Public engagement of scientists: https://doi.org/10.34778/1h
Characteristics of university websites: https://doi.org/10.34778/1f
Dialogical strategies of science communicators: https://doi.org/10.34778/1g

References

Acatech – Deutsche Akademie der Technikwissenschaften, Nationale Akademie der Wissenschaften Leopoldina, Union der deutschen Akademien der Wissenschaften (2017). *Social Media und digitale Wissenschaftskommunikation. Analyse und Empfehlungen zum Umgang mit Chancen und Risiken in der Demokratie [Social Media and digital science communication. Analysis and recommendations for managing chances and risks in a democracy]*. München.

Albæk, E. (2011). The interaction between experts and journalists in news journalism. *Journalism*, *12*(3), 335–348.

Ashlin, A., & Ladle, R. J. (2006). Science communication. Environmental science adrift in the blogosphere. *Science*, *312*(5771), 201.

Askanius, T., & Uldam, J. (2011). Online social media for radical politics: Climate change activism on YouTube. *International Journal of Electronic Governance*, *4*(1/2), 69.

Bal, T. L., & Sharik, T. L. (2019). Web content analysis of university forestry and related natural resources landing webpages in the United States in relation to student and faculty diversity. *Journal of Forestry*, *117*(4), 379–397.

Bauer, M. W. (2016). Results of the essay competition on the 'deficit concept'. *Public Understanding of Science*, *25*(4), 398–399.

Bélanger, C. H., Bali, S., & Longden, B. (2013). How Canadian universities use social media to brand themselves. *Tertiary Education and Management*, *20*(1), 14–29.

Bonfadelli, H., Fähnrich, B., Lüthje, C., Milde, J., Rhomberg, M., & Schäfer, M. S. (2017). Das Forschungsfeld Wissenschaftskommunikation [Science communication as a research field]. In H. Bonfadelli, B. Fähnrich, C. Lüthje, J. Milde, M. Rhomberg, & M. S. Schäfer (Eds.), *Forschungsfeld Wissenschaftskommunikation* (pp. 3–14). Wiesbaden: Springer VS.

Bortree, D. S., & Seltzer, T. (2009). Dialogic strategies and outcomes: An analysis of environmental advocacy groups' Facebook profiles. *Public Relations Review*, *35*(3), 317–319.

Bozyigit, S., & Akkan, E. (2014). Linking universities to the target market via web sites: A content analysis of Turkish private universities' web sites. *Procedia - Social and Behavioral Sciences*, *148*, 486–493.

Brechman, J. M., Lee, C.-J., & Cappella, J. N. (2009). Lost in translation? A comparison of cancer-genetics reporting in the press release and its subsequent coverage in lay press. *Science Communication*, *30*(4), 453–474.

Brechman, J. M., Lee, C.-J., & Cappella, J. (2011). Distorting genetic research about cancer: From bench science to press release to published news. *The Journal of Communication*, *61*(3), 496–513.

Brossard, D. (2013). New media landscapes and the science information consumer. *Proceedings of the National Academy of Sciences of the United States of America*, *110 Suppl 3*, 14096–14101.

Bubela, T. M., Nisbet, M. C., Borchelt, R., Brunger, F., Critchley, C., . . . Caulfield, T. (2009). Science communication reconsidered. *Nature Biotechnology*, *27*(6), 514–518.

Bubela, T. M., & Caulfield, T. A. (2004). Do the print media “hype” genetic research? A comparison of newspaper stories and peer-reviewed research papers. *CMAJ: Canadian Medical Association Journal = Journal De L’association Medicale Canadienne*, *170*(9), 1399–1407.

Bucchi, M. (2008). Of deficits, deviations and dialogues: Theories of public communication of science. In M. Bucchi & B. Trench (Eds.), *Handbook of public communication of science and technology* (pp. 57–67). London: Routledge.

Buchholz, U. (2019). Interne Hochschulkommunikation [Internal communication of universities]. In B. Fähnrich, J. Metag, S. Post, & M. S. Schäfer (Eds.), *Forschungsfeld Hochschulkommunikation* (pp. 141–164). Wiesbaden: Springer Fachmedien Wiesbaden.

Burns, T. W., O‘Connor, D. J., & Stocklmayer, S. M. (2003). Science communication: A contemporary definition. *Public Understanding of Science*, *12*(2), 183–202.

Capriotti, P., Carretón, C., & Castillo, A. (2016). Testing the level of interactivity of institutional websites: From museums 1.0 to museums 2.0. *International Journal of Information Management*, *36*(1), 97–104.

Capriotti, P., & Pardo Kuklinski, H. (2012). Assessing dialogic communication through the Internet in Spanish museums. *Public Relations Review*, *38*(4), 619–626.

Carlos, V. S., & Rodrigues, R. G. (2012). Web site quality evaluation in Higher Education institutions. *Procedia Technology*, *5*, 273–282.

Castillo-Esparcia, A., Almansa-Martínez, A., & Smolak-Lozano, E. (2015). East European think tanks in social media – towards the model of evaluation of effective communication/PR strategies: Case study analysis. *Catalan Journal of Communication & Cultural Studies*, *7*(2), 231–250.

Chapleo, C., Carrillo Durán, M. V., & Castillo Díaz, A. (2011). Do UK universities communicate their brands effectively through their websites? *Journal of Marketing for Higher Education*, *21*(1), 25–46.

Cho, M., Schweickart, T., & Haase, A. (2014). Public engagement with nonprofit organizations on Facebook. *Public Relations Review*, *40*(3), 565–567.

Dudo, A., & Besley, J. C. (2016). Scientists’ prioritization of communication objectives for public engagement. *PloS One*, *11*(2).

Durant, J. (1999). Participatory technology assessment and the democratic model of the public understanding of science. *Science and Public Policy*, *26*(5), 313–319.

Else, F. C., & Crookes, P. A. (2015). The online presence of teaching and learning within Australian university websites. *Journal of Higher Education Policy and Management*, *37*(4), 363–373.

Entradas, M., & Bauer, M. M. (2016). Mobilisation for public engagement: Benchmarking the practices of research institutes. *Public Understanding of Science*, *26*(7), 771–788.

Fähnrich, B. (2018a). Digging deeper? Muddling through? How environmental activists make sense and use of science — an exploratory study. *Journal of Science Communication*, *17*(03).

Fähnrich, B. (2018b). Einflussreich, aber wenig beachtet? Eine Meta-Studie zum Stand der deutschsprachigen Forschung über strategische Kommunikation von Wissenschaftsorganisationen [Influential, but less noticed? A meta-study on the state of research on strategic communication of science organizations]. *Publizistik*, *63*(3), 407–426.

Fischhoff, B., & Scheufele, D. A. (2013). The science of science communication. Introduction. *Proceedings of the National Academy of Sciences of the United States of America*, *110 Suppl 3*, 14031–14032.

Forkosh-Baruch, A., & Hershkovitz, A. (2012). A case study of Israeli higher-education institutes sharing scholarly information with the community via social networks. *The internet and higher education*, *15*(1), 58–68.

Gantenberg, J. (2018). *Wissenschaftskommunikation in Forschungsverbünden. Zwischen Ansprüchen und Wirklichkeit [Science communication in research partnerships. Between expectations and reality]*. Wiesbaden: Springer Fachmedien Wiesbaden.

Goodwin, S., Jeng, W., & He, D. (2014). Changing communication on researchgate through interface updates. *Proceedings of the American Society for Information Science and Technology*, *51*(1), 1–4.

Gordon, J., & Berhow, S. (2009). University websites and dialogic features for building relationships with potential students. *Public Relations Review*, *35*(2), 150–152.

Gottschall, K., & Saltmarsh, S. (2016). 'You're not just learning it, you're living it!: ' Constructing the 'good life' in Australian university online promotional videos. *Discourse: Studies in the Cultural Politics of Education*, *38*(5), 768–781.

Greenberg, J., Knight, G., & Westersund, E. (2011). Spinning climate change: Corporate and NGO public relations strategies in Canada and the United States. *International Communication Gazette*, *73*(1-2), 65–82.

Greenwood, G. (2012). Examining the presence of social media on university web sites. *Journal of College Admission*, *216*, 24–28. Retrieved from http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.919.3565&rep=rep1&type=pdf.

Hara, N., Abbazio, J., & Perkins, K. (2019). An emerging form of public engagement with science: Ask Me Anything (AMA) sessions on Reddit r/science. *PloS One*, *14*(5).

Herrmann-Giovanelli, I. (2013). *Wissenschaftskommunikation aus der Sicht von Forschenden [Science communication from the perspective of the researchers]*. Konstanz: UVK.

Irwin, A., & Wynne, B. (1996). *Misunderstanding science: The public reconstruction of science and technology*. Cambridge: University Press.

Jahng, M. R., & Lee, N. (2018). When scientists tweet for social changes: Dialogic communication and collective mobilization strategies by flint water study scientists on Twitter. *Science Communication*, *40*(1), 89–108.

Jarreau, P. B., Dahmen, N. S., & Jones, E. (2019). Instagram and the science museum: A missed opportunity for public engagement. *Journal of Science Communication*, *18*(02).

Jensen, B. (2013). Instagram as cultural heritage: User participation, historical documentation, and curating in museums and archives through social media. *2013 Digital Heritage International Congress (DigitalHeritage)* (pp. 311–314). IEEE.

Jun, J. (2011). How climate change organizations utilize websites for public relations. *Public Relations Review*, *37*(3), 245–249.

Jünger, J., & Fähnrich, B. (2019). Does really no one care?: Analyzing the public engagement of communication scientists on Twitter. *New Media & Society*, *7*(2).

Kahan, D. M., Scheufele, D. A., & Jamieson, K. H. (2017). Introduction: Why science communication? In K. H. Jamieson, D. M. Kahan, & D. A. Scheufele (Eds.), *The Oxford Handbook of the Science of Science Communication* (pp. 1–19). Oxford: Oxford University Press.

Kang, S., & Norton, H. E. (2006). Colleges and universities' use of the World Wide Web: A public relations tool for the digital age. *Public Relations Review*, *32*(4), 426–428.

Kelly, L. (2010). How web 2.0 is changing the nature of museum work. *Curator: The Museum Journal*, *53*(4), 405–410.

Kessler, S. H., Fähnrich, B., & Schäfer, M. S. (2020). Science communication research in the German-speaking countries: A content analysis of conference abstracts. *Studies in Communication Sciences*, *19*(2), 243–251.

Kouper, I. (2010). Science blogs and public engagement with science: Practices, challenges, and opportunities. *Journal of Science Communication*, *9*(1).

Lederbogen, U., & Trebbe, J. (2003). Promoting science on the web. *Science Communication*, *24*(3), 333–352.
Lee, N. M., & VanDyke, M. S. (2015). Set it and forget it: The one-way use of social media by government agencies communicating science. *Science Communication*, *37*(4), 533–541.
Lee, N. M., VanDyke, M. S., & Cummins, R. G. (2017). A missed opportunity?: NOAA's use of social media to communicate climate science. *Environmental Communication*, *12*(2), 274–283.
Lehmkuhl, M., & Leidecker-Sandmann, M. (2019). „Visible scientists revisited": Zum Zusammenhang von wissenschaftlicher Reputation und der Präsenz wissenschaftlicher Experten in der Medienberichterstattung über Infektionskrankheiten ["Visible scientists revisited". On the relationship between scientific reputation and the public presence of scientific experts in mass media coverage of infectious diseases]. *Publizistik*, *64*(4), 479–502.
Linvill, D. L., McGee, S. E., & Hicks, L. K. (2012). Colleges' and universities' use of Twitter: A content analysis. *Public Relations Review*, *38*(4), 636–638.
Linvill, D. L., Rowlett, J. T., & Kolind, M. M. (2015). Academic Pinstitution: Higher education's use of Pinterest for relationship marketing. *Journal of Relationship Marketing*, *14*(4), 287–300.
Liu, X., Vedlitz, A., Stoutenborough, J. W., & Robinson, S. (2015). Scientists' views and positions on global warming and climate change: A content analysis of congressional testimonies. *Climatic Change*, *131*(4), 487–503.
Lovari, A., & Giglietto, F. (2012). Social media and Italian universities: An empirical study on the adoption and use of Facebook, Twitter and Youtube. *SSRN Electronic Journal*. Advance online publication.
Lovejoy, K., Waters, R. D., & Saxton, G. D. (2012). Engaging stakeholders through Twitter: How nonprofit organizations are getting more out of 140 characters or less. *Public Relations Review*, *38*(2), 313–318.
Lüthje, C. (2017). Interne informelle Wissenschaftskommunikation [Internal informal science communication]. In H. Bonfadelli, B. Fähnrich, C. Lüthje, J. Milde, M. Rhomberg, & M. S. Schäfer (Eds.), *Forschungsfeld Wissenschaftskommunikation* (pp. 109–124). Wiesbaden: Springer VS.
Luzón, M. J. (2009). Scholarly hyperwriting: The function of links in academic weblogs. *Journal of the American Society for Information Science and Technology*, *60*(1), 75–89.
MacKenzie, L. E. (2019). Science podcasts: Analysis of global production and output from 2004 to 2018. *Royal Society Open Science*, *6*(1), 180932.
Maeseele, P. (2014). NGOs and GMOs. *Javnost - the Public*, *16*(4), 55–72.
Mahrt, M., & Puschmann, C. (2014). Science blogging: An exploratory study of motives, styles, and audience reactions. *Journal of Science Communication*, *13*(03).
Marcinkowski, F., Kohring, M., Fürst, S., & Friedrichsmeier, A. (2013). Organizational influence on scientists' efforts to go public. *Science Communication*, *36*(1), 56–80.
McAllister-Spooner, S. M., & Kent, M. L. (2009). Dialogic public relations and resource dependency: New Jersey community colleges as models for web site effectiveness. *Atlantic Journal of Communication*, *17*(4), 220–239.
Metag, J., & Schäfer, M. S. (2017). Hochschulen zwischen Social Media-Spezialisten und Online-Verweigerern.: Eine Analyse der Online-Kommunikation promotionsberechtigter Hochschulen in Deutschland, Österreich und der Schweiz [Universities between social media specialists and holdouts. An analysis of universities' online communication in Germany, Austria, and Switzerland]. *Studies in Communication | Media*, *6*(2), 160–195.
Metag, J., & Schäfer, M. S. (2019). Hochschulkommunikation in Online-Medien und Social Media [Universities' communication in online and social media]. In B. Fähnrich, J. Metag, S. Post, & M. S. Schäfer (Eds.), *Forschungsfeld Hochschulkommunikation* (pp. 363-391). Wiesbaden: Springer Fachmedien Wiesbaden.

Morton, T. A., Rabinovich, A., Marshall, D., & Bretschneider, P. (2011). The future that may (or may not) come: How framing changes responses to uncertainty in climate change communications. *Global Environmental Change*, *21*(1), 103–109.
Ocobock, C., & Hawley, P. (2020). Science on tap: Effective public engagement or preaching to the choir? *Journal of Science Communication*, *19*(01).
Peruta, A., & Shields, A. B. (2016). Social media in higher education: Understanding how colleges and universities use Facebook. *Journal of Marketing for Higher Education*, *27*(1), 131–143.
Peters, H. P. (2013). Gap between science and media revisited: Scientists as public communicators. *Proceedings of the National Academy of Sciences of the United States of America*, *110 Suppl 3*, 14102–14109.
Peters, H. P., Brossard, D., Cheveigné, S. de, Dunwoody, S., Kallfass, M., Miller, S., & Tsuchida, S. (2008). Science-media interface. *Science Communication*, *30*(2), 266–276.
Pfenning, U. (2012). Zur Evaluation von Modellprojekten zur Wissenschaftskommunikation [On the evaluation of model projects for science communication]. In B. Dernbach, C. Kleinert, & H. Münder (Eds.), *Handbuch Wissenschaftskommunikation* (pp. 341–352). Wiesbaden: VS Verlag für Sozialwissenschaften.
Rauchfleisch, A., & Schäfer, M. S. (2018). Structure and development of science communication research: Co-citation analysis of a developing field. *Journal of Science Communication*, *17*(03).
Reber, B. H., & Kim, J. K. (2006). How activist groups use websites in media relations: Evaluating online press rooms. *Journal of Public Relations Research*, *18*(4), 313–333.
Schäfer, M. S. (2017). Wissenschaftskommunikation Online [Science communication online]. In H. Bonfadelli, B. Fähnrich, C. Lüthje, J. Milde, M. Rhomberg, & M. S. Schäfer (Eds.), *Forschungsfeld Wissenschaftskommunikation* (pp. 275–293). Wiesbaden: Springer Fachmedien Wiesbaden.
Schäfer, M. S., Kessler, S. H., & Fähnrich, B. (2019). Analyzing science communication through the lens of communication science: Reviewing the empirical evidence. In A. Leßmöllmann, M. Dascal, & T. Gloning (Eds.), *Science Communication* (pp. 77–104). Berlin, Boston: De Gruyter.
Schäfer, M. S., Kristiansen, S., & Bonfadelli, H. (2015). Wissenschaftskommunikation im Wandel: Relevanz, Entwicklung und Herausforderungen des Forschungsfeldes [Science communication in transition: relevance, development and challenges of the research field]. In H. Bonfadelli, M. S. Schäfer, & S. Kristiansen (Eds.), *Wissenschaftskommunikation im Wandel* (pp. 10–42). Köln: von Halem.
Serong, J., Koppers, L., Luschmann, E., Molina Ramirez, A., Kersting, K., Rahnenführer, J., & Wormer, H. (2017). Öffentlichkeitsorientierung von Wissenschaftsinstitutionen und Wissenschaftsdisziplinen [Public orientation of scientific institutions and scientific disciplines]. *Publizistik*, *62*(2), 153–178.
Shadinger, D. (2013). Dialogistic presence on community college websites in nine megastates. *Community College Journal of Research and Practice*, *37*(12), 925–935.
Shema, H., Bar-Ilan, J., & Thelwall, M. (2012). Research blogs and the discussion of scholarly information. *PloS One*, *7*(5), e35869.
Siggener Kreis (2013). Siggener Denkanstoß 2013 – Zur Zukunft der Wissenschaftskommunikation [Food for thought from Siggen 2013 - on the future of science communication]. Retrieved from https://www.wissenschaft-im-dialog.de/projekte/siggener-kreis/.
Sturgis, P. (2014). On the limits of public engagement for the governance of emerging technologies. *Public Understanding of Science*, *23*(1), 38–42.
Su, L. Y.-F., Scheufele, D. A., Bell, L., Brossard, D., & Xenos, M. A. (2017). Information-sharing and community-building: Exploring the use of Twitter in science public relations. *Science Communication*, *39*(5), 569–597.

Summm, A., & Volpers, A.-M. (2016). What's science? Where's science? Science journalism in German print media. *Public Understanding of Science*, *25*(7), 775–790.
Sumner, P., Vivian-Griffiths, S., Boivin, J., Williams, A., Bott, L., Adams, R., ... Chambers, C. D. (2016). Exaggerations and caveats in press releases and health-related science news. *PloS One*, *11*(12).
Sumner, P., Vivian-Griffiths, S., Boivin, J., Williams, A., Venetis, C. A., Davies, A., ... Chambers, C. D. (2014). The association between exaggeration in health related science news and academic press releases: Retrospective observational study. *BMJ (Clinical Research Ed.)*, *349*.
Taylor, M., Kent, M. L., & White, W. J. (2001). How activist organizations are using the Internet to build relationships. *Public Relations Review*, *27*(3), 263–284.
Visschers, V. H. M. (2018). Public perception of uncertainties within climate change science. *Risk Analysis*, *38*(1), 43–55.
Walter, S., Lörcher, I., & Brüggemann, M. (2019). Scientific networks on Twitter: Analyzing scientists' interactions in the climate change debate. *Public Understanding of Science*, *28*(6), 696–712.
Waters, R. D., Burnett, E., Lamm, A., & Lucas, J. (2009). Engaging stakeholders through social networking: How nonprofit organizations are using Facebook. *Public Relations Review*, *35*(2), 102–106.
Waters, R. D., & Jamal, J. Y. (2011). Tweet, tweet, tweet: A content analysis of nonprofit organizations' Twitter updates. *Public Relations Review*, *37*(3), 321–324.
Weingart, P., & Guenther, L. (2016). Science communication and the issue of trust. *Journal of Science Communication*, *15*(05).
Weitze, M.-D., & Heckl, W. M. (2016). *Wissenschaftskommunikation - Schlüsselideen, Akteure, Fallbeispiele [Science communication - key ideas, players, and case studies]*. Berlin, Heidelberg: Springer Berlin Heidelberg.
Winters, M., Larsson, A., Kowalski, J., & Sundberg, C. J. (2019). The association between quality measures of medical university press releases and their corresponding news stories-Important information missing. *PloS One*, *14*(6).
Yang, A., & Taylor, M. (2010). Relationship-building by Chinese ENGOs' websites: Education, not activation. *Public Relations Review*, *36*(4), 342–351.
Yavchitz, A., Boutron, I., Bafeta, A., Marroun, I., Charles, P., Mantz, J., & Ravaud, P. (2012). Misrepresentation of randomized controlled trials in press releases and news coverage: A cohort study. *PLoS Medicine*, *9*(9).
Yeon, H. M., Choi, Y., & Kiousis, S. (2007). Interactive communication features on nonprofit organizations' webpages for the practice of excellence in public relations. *Journal of Website Promotion*, *1*(4), 61–83.
Zhang, Y., & O'Halloran, K. L. (2013). 'Toward a global knowledge enterprise': University websites as portals to the ongoing marketization of higher education. *Critical Discourse Studies*, *10*(4), 468–485.

Dr. Nina Wicke was a research assistant at the Institute for Communication Science at Technische Universität Braunschweig. Her research focuses on science communication and climate change communication from an audience perspective.



Die Inhaltsanalyse im Forschungsfeld der Risikokommunikation

Angela Osterheider

1 Einleitung

Die Risikokommunikation wird definiert als interaktiver oder iterativer Prozess, innerhalb dessen Informationen und Meinungen über Risiken und Unsicherheiten zwischen Individuen, Gruppen und Institutionen ausgetauscht werden. Im Mittelpunkt dieses Austauschs steht die Bewertung, Charakterisierung und das Management der Risiken (z. B. McComas 2006; NRC 1989; Palenchar 2010). Für ein besseres Verständnis der strategischen Risikokommunikation von KommunikatorInnen bzw. Organisationen, lohnt sich ein Blick auf die Definitionen von Risikokommunikation, Risiko und strategischer Kommunikation. Eine Vielzahl von AutorInnen diskutieren, reflektieren und erweitern die Aspekte und Perspektiven der Risikokommunikation. Laut Gurabardhi et al. (2005) ist zudem die Anzahl der Publikationen im Bereich der Risikokommunikation gestiegen, „one-way-communication“ wird weniger thematisiert und die „two-way-communication“ rückt mehr in den Vordergrund. Zudem gewinnen partizipative Elemente an Bedeutung (z. B. Renn 2010; weitere Perspektiven: effektive Risikokommunikation: Arvai und Rivers 2014; Covello 2010; Risikokommunikation und -management: Heath 2018; „best practices“: Lundgren und McMakin 2018). Der Begriff des Risikos wird aus Sicht verschiedener Disziplinen unterschiedlich definiert. Zum einen existiert eine durch die Mathematik und Naturwissenschaften geprägte mathematisch-probabilistische Perspektive: Das Risiko wird als Produkt von

A. Osterheider (✉)
Objective 2/Fostering Knowledge Exchange, Berlin University Alliance, Berlin, Deutschland
E-Mail: angela.osterheider@berlin-university-alliance.de

F. Oehmer-Pedrazzi et al. (Hrsg.), *Standardisierte Inhaltsanalyse in der Kommunikationswissenschaft – Standardized Content Analysis in Communication Research,* https://doi.org/10.1007/978-3-658-36179-2_36

Eintrittswahrscheinlichkeit und dem Ausmaß eines Schadens beschrieben (Knight 2006; Palenchar 2010). Zum anderen gibt es eine subjektive Perspektive, die bei der Betrachtung von Risiken individuelle, gesellschaftliche und kulturelle Aspekte berücksichtigt (Beck 2003; Douglas und Wildavsky 2010; Slovic 2011).

Die (strategische) Risikokommunikation ist unter anderem gekennzeichnet durch die Kommunikation über Unsicherheiten, Ungewissheiten und die Konflikthaftigkeit des Themas (zu strategischer Risikokommunikation: Palenchar und Heath 2006, 2007; Raupp 2014; Smillie und Blissett 2010); näheres zur strategischen Kommunikation allgemein: Hallahan et al. 2007; Heath et al. 2018; Holtzhausen und Zerfass 2015). Ein übergreifendes Ziel der Risikokommunikation ist der Aufbau, die Wahrung und Stärkung von Vertrauen und Glaubwürdigkeit (Bentele und Janke 2008; Covello 2010; Earle 2010; Earle und Cvetkovich 1995; MacComas 2006; Renn 2010; Renn und Levine 1991; allgemein: Herger 2006; Röttger 2019). Weitere Ziele sind die Sensibilisierung für Risiken, die Vermittlung von Informationen, um Risiken besser zu verstehen und angemessen reagieren zu können sowie die Partizipation verschiedener Anspruchsgruppen, um einen Dialog herzustellen oder einen Konsens zu erzielen (Covello 2010; Palenchar und Heath 2007; Renn 2010; Rowe und Frewer 2005).

Im Bereich der (strategischen) Risikokommunikation bzw. der Risikokommunikation von Organisationen und KommunikatorInnen gibt es Überschneidungen mit den Forschungsgebieten Gesundheits- sowie Wissenschaftskommunikation. Auch die Übergänge zur Krisenkommunikation sind fließend: So ist die Kommunikation über Risiken auch ein Teil der Krisenkommunikation (Frandsen und Johansen 2020). Daher werden im Folgenden Untersuchungen zur strategischen bzw. organisationalen Kommunikation in Krisensituationen zwar nicht fokussiert, aber ausgewählte Studien, die auch Aspekte der Risikokommunikation in den Blick nehmen, berücksichtigt. Die Risikokommunikation wird hierbei als proaktives Instrument zur Bewältigung von Krisen verstanden (Coombs 2015; Überblick zu Ansätzen von Risiko- und Krisenkommunikation im Vergleich z. B. Frandsen und Johansen 2020). In den Studien zur strategischen Risikokommunikation werden als Grundlage häufig der theoretische Ansatz des „Social Amplification of Risk Framework" (SARF) (Pidgeon et al. 2003), das „Crisis and Emergency Risk Communication-Modell" (CERC) (Reynolds und Seeger 2005; Veil et al. 2008) sowie der Message Centered Approach (Sellnow et al. 2009) verwendet.

Reviews und Metaanalysen zeigen die ganze Bandbreite der Entwicklungen und Untersuchungen im Bereich der Risikokommunikation. Gurabardhi et al. (2005) betrachten mithilfe einer quantitativen Analyse der Inhalte der Forschungsliteratur die Entwicklungen in den Jahren 1988 bis 2000: Untersucht wird unter anderem die Thematisierung bzw. Auseinandersetzung mit Strategien in der Risikokommunikation. Zahlreiche Reviews beschäftigen sich mit dem Bereich Gesundheit und insbesondere Infektionen (Barrelet et al. 2013; Gesser-Edelsburg et al. 2015; McComas 2006; Sopory et al. 2019; Thomas et al. 2016; Toppenberg-Pejcic et al. 2019). Van der Vegt (2018) beleuchtet in seinem Review die Forschungslandschaft rund um komplexe Themen mit Bezug zur Umwelt und Aspekten des „public engagements"; auch Fitzpatrick-

Lewis (2010) beschäftigt sich mit Umweltthemen. Im Mittelpunkt des Reviews von Eriksson (2018) stehen Studien, die die Nutzung von Social-Media-Kanälen für die effektive Risiko- und Krisenkommunikation untersuchen. Die Forschungslage zur Kommunikation über Lebensmittel(-sicherheit) wird in Bezug auf Zielgruppen und Inhalte von Frewer et al. (2016) analysiert. Detailliert beschäftigt sich van der Meer (2016) mit verschiedenen Ansätzen der automatisierten Inhaltsanalyse im Bereich der Krisenkommunikation und illustriert diese auch anhand einiger Studien, die ebenfalls die Kommunikation von Risiken fokussieren. Vor dem Hintergrund der umfangreichen und digital verfügbaren Inhalte von unterschiedlichen AkteurInnen wird diese Methode als geeignetes Mittel der Wahl bezeichnet (van der Meer 2016). Fragen und Aspekte der strategischen Risikokommunikation werden aus Sicht verschiedener Disziplinen untersucht. Wie bereits erwähnt, steht zudem die Untersuchung der Kommunikation über Gesundheits- und Umweltthemen im Vordergrund (Gurabardhi et al. 2004; MacComas 2006).

2 Forschungsdesign und Methoden

Im Bereich der (strategischen) Risikokommunikation von Organisationen und KommunikatorInnen werden sowohl quantitative als auch qualitative Inhaltsanalysen durchgeführt (Methoden zur Untersuchung von Risikokommunikation allg.: Mello 2017); wobei automatisierte Inhaltsanalysen nur einen geringen Anteil ausmachen (van der Meer 2016). Inhalte von Pressemitteilungen (Gerken und van der Meer 2019; Ju et al. 2015; Raupp 2014; Rossmann et al. 2018), Websites (Online-Dokumente von verschiedenen KommunikatorInnen: Boholm et al. 2015) und Stellungnahmen/Guidelines (Gesser-Edelsburg et al. 2014) von KommunikatorInnen werden inhaltsanalytisch ausgewertet. Häufig wird in diesem Zuge auch die Medienberichterstattung in den Blick genommen (Gerken und van der Meer 2019; Ju et al. 2015; Ophir 2018; Roberts und Veil 2016; Raupp 2014; Rossmann et al. 2018). Auch Interviews werden zusätzlich inhaltsanalytisch untersucht (Drews 2018; Gesser-Edelsburg et al. 2014).

Ein wachsender Forschungsstrang beschäftigt sich mit der Kommunikation auf Social-Media-Kanälen wie Facebook, Twitter und Instagram (Eriksson 2018; Thomas et al. 2016). Auch in diesem Bereich sind Inhaltsanalysen das Mittel der Wahl (Crook et al. 2016; Dalrymlple et al. 2016; Guidry et al. 2017; Liao et al. 2020; Liu und Kim 2011; Lwin et al. 2018; Rahim et al. 2019; Slavik et al. 2021; Sutton et al. 2018, 2020; Tampere et al. 2016). Zudem werden automatisierte standardisierte Inhaltsanalysen durchgeführt, und ihre Anzahl nimmt zu (Gerken und van der Meer 2019; Ophir 2018; Schultz et al. 2012; van der Meer und Verhoeven 2013).

Automatische und manuelle quantitative Inhaltsanalysen (z. B. Ophir 2018; Ruzza et al. 2020) werden innerhalb einer Studie gleichzeitig eingesetzt. Auch Befragungen werden inhaltsanalytisch ausgewertet (Lyu et al. 2013; Robinson und Newstetter 2003; Wagner-Egger et al. 2011). Typisch für die Forschung im Bereich Risikokommunikation

von Organisationen und KommunikatorInnen sind Fallstudien (Boholm et al. 2015; Dalrymple et al. 2016; Gerken und van der Meer 2019; Gesser-Edelsburg et al. 2014; Guidry et al. 2017; Kott und Limaye 2016; Liu und Kim 2011; Lwin et al. 2018; Raupp 2014; Roberts und Veil 2016; Rossmann et al. 2018; Schultz et al. 2012). Guidry et al. (2017) untersuchen bspw. mithilfe einer Inhaltsanalyse, wie verschiedene Public-Health-Organisationen Instagram und Twitter im Falle eines Ebola-Ausbruchs nutzen. Raupp (2014) analysiert Pressemitteilungen sowie die Medienberichterstattung über den E. Coli-Ausbruch im Jahr 2011 anhand einer Inhalts- und Framinganalyse auf Basis des SARF-Ansatzes: Unter anderem wird die Risikokommunikation von Behörden wie dem Robert Koch-Institut und dem Bundesinstitut für Risikobewertung in den Blick genommen.

3 Trends, Variablen und Konstrukte

Inhaltsanalysen im Bereich der (strategischen) Risikokommunikation von KommunikatorInnen und Organisationen betreffen sowohl Themen als auch KommunikatorInnen. Der thematische Fokus liegt auf den Gebieten Gesundheit, Umwelt und Sicherheit. Im Bereich Gesundheit werden Infektionskrankheiten, und dabei v. a. Epidemien und Pandemien, in den Blick genommen (Crook et al. 2016; Dalrymple et al. 2016; Gerken und van der Meer 2019; Gesser-Edelsburg et al. 2014; Guidry et al. 2017; Liao et al. 2020; Liu und Kim 2011; Lwin et al. 2018; Lyu et al. 2013; Ophir 2018; Raupp 2014; Rossmann et al. 2018; Slavik et al. 2021; Strekalova 2017; Sutton et al. 2020; Wagner-Egger et al. 2011); außerdem weitere Gesundheitsrisiken (Sutton et al. 2018; Robinson und Newstetter 2003). Die Kommunikation über Umweltthemen wird ebenfalls inhaltsanalytisch erforscht (Boholm et al. 2015; Eriksson 2017; Schultz et al. 2012; Tampere et al. 2016; Kuhlicke et al. 2016; Upreti und van der Horst 2004). Lebensmittelsicherheit ist auch ein Thema (Frewer et al. 2003; Ju et al. 2015; Roberts und Veil 2016; Ruzza et al. 2020; van de Brug et al. 2014).

Folgende Konstrukte und Aspekte werden – unabhängig von der thematischen Ausrichtung der Studien – häufig untersucht:

1. Vertrauen und Glaubwürdigkeit: Das übergreifende Ziel der strategischen Risikokommunikation ist der Aufbau, die Wahrung und die Stärkung von Vertrauen und Glaubwürdigkeit. In den Studien wird oftmals auf die Überlegungen von Palenchar und Heath (2007) zur strategischen Risikokommunikation hingewiesen, aber auch auf den Begriff des „social trust“ (Earle 2010; Earle und Cvetkovich 1995) wird zurückgegriffen. Beleuchtet wird das Vertrauen in und die Glaubwürdigkeit von AkteurInnen und Regulierungsinstanzen sowie ihren zur Verfügung gestellten Quellen resp. Inhalten (Blanchard et al. 2005). Dalrymple et al. (2016) und Reynolds (2009) untersuchen die Bildung von Vertrauen als Teil der strategischen Risikokommunikation auf Social-Media-Kanälen; Guidry et al. (2017) nehmen in diesem Zusammenhang neben dem Vertrauen auch die Glaubwürdigkeit medizinischer Organisationen

in den Blick. Die Vertrauenswürdigkeit von Behörden aus Laienperspektive wird analysiert (Wagner-Egger et al. 2011) und auch das Vertrauen in Gesundheitsbehörden (Blanchard et al. 2005); Guidelines und Stellungnahmen von Gesundheitsorganisationen und ihre Implementierung werden hinsichtlich der Herausbildung von Vertrauen untersucht (Gesser-Edelsburg et al. 2014).

2. Framing von Risiken: Analysiert werden vor allem strategische Frames von KommunikatorInnen, aber auch journalistische Frames; das Framing von Risiken bzw. das Framing risikobehafteter Themen wird hinsichtlich verschiedener Inhalte beleuchtet (allgemein: van der Meer und Verhoeven 2013; Umwelt: Schultz et al. 2012; Pandemien, Infektionsgeschehen: Kott und Limaye 2016; Liu und Kim 2011; Raupp 2014; Rossmann et al. 2018). Einige Studien beziehen Social-Media-Kanäle mit ein (Liu und Kim 2011; van der Meer und Verhoeven 2013); andere analysieren das Framing innerhalb von Fallstudien (Raupp 2014; Rossmann et al. 2018; Schultz et al. 2012).
3. Einsatz verschiedener Strategien zur Erreichung der Ziele in der Risikokommunikation: Teilt man die Strategien in drei Kategorien ein (Dialog, Persuasion, Information), lässt sich beobachten, dass sich in der Forschungsliteratur 44 % der Studien mit Persuasion, 26 % mit Information und 33 % mit Dialog beschäftigen; wobei die persuasiven und dialogischen Strategien im Zeitverlauf zunehmen (Gurabardhi 2005). Verschiedene Strategien werden inhaltsanalytisch untersucht, z. B. anhand der Gestaltung, Verbreitung und Wirkung von Risikobotschaften oder auch der Auswertung von Dokumenten, wie Stellungnahmen und Guidelines (Blanchard et al. 2005; Blendon et al. 2003; Boholm et al., 2015; Kuhlicke et al., 2016; Lwin et al., 2018; Slavik et al. 2021; Upreti und van der Horst 2004).
4. Partizipation und „engagement“: Nicht nur in der Praxis der Risikokommunikation wird vermehrt die Initiierung von Dialogen über Risiken forciert, sondern auch in der Forschung wird dies verstärkt in den Blick genommen. Insbesondere Social-Media-Kanäle werden hinsichtlich Partizipation und des „engagements“ analysiert (Dalrymple et al. 2016; Guidry et al. 2017; Liao et al. 2020; Lwin et al. 2018; Rahim et al. 2019; Slavik et al. 2021; Strekalova 2017; Tampere et al. 2016); aber auch allgemein das „public engagement“ (van der Vegt 2018). Die Einbindung von Stakeholdern in Prozesse der Risikokommunikation wird ebenfalls beleuchtet (Kuhlicke et al. 2016; Upreti und van der Horst 2004).

4 Forschungsdesiderate

Mit Blick auf die Forschungslandschaft wird deutlich, dass oftmals Krisen als Ausgangspunkt genommen werden, um die (strategische) Kommunikation von Organisationen und KommunikatorInnen zu untersuchen. Deshalb wäre es sinnvoll, zukünftig auch die Kommunikation von Risiken und Unsicherheiten im Rahmen inhaltsanalytischer Studien stärker zu fokussieren – auch ohne den Anlass einer Krise. Des Weiteren

wären mehr vergleichende Studien sinnvoll, um die strukturellen Einflussfaktoren auf die Kommunikation von Risiken zu erforschen.

Die Kombination verschiedener Methoden zur Untersuchung der strategischen Risikokommunikation ist sehr ergiebig und sollte weiterverfolgt werden. Gerade die Analyse von Dokumenten der Organisationen/KommunikatorInnen in der Verbindung mit der Durchführung von Interviews oder der Inhaltsanalyse der Medienberichterstattung sowie der Social-Media-Kanäle bietet sich in diesem Fall an. Langzeitstudien sollten des Weiteren vermehrt durchgeführt werden (wie z. B. Eriksson 2017). Aus methodischer Perspektive werden sowohl qualitative als auch standardisierte Inhaltsanalysen durchgeführt, wobei automatisierte Inhaltsanalysen nur einen geringen Anteil ausmachen (van der Meer 2016); auffällig ist hierbei die verstärkte Fokussierung auf die Untersuchung von Social-Media-Kanälen wie Twitter, Facebook und Instagram: Nicht nur allgemein, sondern gerade in diesem Bereich sollte der Einsatz automatisierter standardisierter Inhaltsanalysen stärker fokussiert werden.

Inhaltlich wäre es wünschenswert, wenn mehr Studien auf dem Gebiet der Kommunikation über Themen wie Umwelt und Sicherheit durchgeführt werden, da der Fokus bisheriger Untersuchungen vor allem auf dem Bereich Gesundheit, insbesondere Infektionsrisiken, liegt. Zudem wird deutlich, dass häufig die Wahrnehmung der Anspruchsgruppen bzw. RezipientInnen im Mittelpunkt steht und nicht die strategische Kommunikation von Organisationen und KommunikatorInnen (Barrelet et al. 2013). Es wäre deshalb sinnvoll, in zukünftigen Studien v. a. den Einsatz und die Umsetzung von Strategien verstärkt in den Blick zu nehmen. Denkbar sind Studien, die die Planung, Entwicklung und Umsetzung der Kommunikationsstrategien untersuchen und evaluieren.

Dialogische bzw. partizipative Strategien sind ein weiterer Untersuchungsgegenstand, der vermehrter Forschung bedarf: Der Schwerpunkt hat sich in der praktischen Risikokommunikation von der Aufklärung über Risiken hin zur Initiierung von Dialogen verschoben und so rücken Fragen der Beteiligung auf dem Feld der strategischen Risikokommunikation mehr und mehr in den Vordergrund.

Literatur

Arvai, J., & Rivers, L. (2014). *Effective risk communication*. *Earthscan Risk in Society Series*. London: Routledge.

Barrelet, C., Bourrier, M., Burton-Jeangros, C., & Schindler, M. (2013). Unresolved issues in risk communication research: The case of the H1N1 pandemic (2009–2011). *Influenza and Other Respiratory Viruses*, *7*(2), 114–119.

Beck, U. (2003). *Risikogesellschaft: Auf dem Weg in eine andere Moderne; [40 Jahre edition suhrkamp* (Sonderausg)]. *edition suhrkamp: Vol. 2432*. Frankfurt am Main: Suhrkamp.

Bentele, G., & Janke, K. (2008). Krisenkommunikation als Vertrauensfrage? Überlegungen zur krisenbezogenen Kommunikation mit verschiedenen Stakeholdern. In T. Nolting & A. Thiesen (Hrsg.), *Krisenmanagement in der Mediengesellschaft*: *Potenziale und Perspektiven in der Krisenkommunikation* (S. 112–132). Wiesbaden: VS Verlag für Sozialwissenschaften.

Blanchard, J. C., Haywood, Y., Stein, B. D., Tanielian, T. L., Stoto, M., & Lurie, N. (2005). In their own words: Lessons learned from those exposed to Anthrax. *American Journal of Public Health*, *95*(3), 489–495.

Blendon, R. J., Benson, J. M., Desroches, C. M., & Weldon, K. J. (2003). Using opinion surveys to track the public's response to a bioterrorist attack. *Journal of Health Communication*, *8(1)*, 83–92; discussion 148–151.

Boholm, M., Arvidsson, R., Boholm, Å., Corvellec, H., & Molander, S. (2015). Dis-agreement: The construction and negotiation of risk in the Swedish controversy over antibacterial silver. *Journal of Risk Research*, *18*(1), 93–110.

Coombs, W. T. (2015). *Ongoing crisis communication: Planning, managing, and responding* (4th ed.). Los Angeles: SAGE.

Covello, V. T. (2010). Strategies for overcoming challenges to effective risk communication. In R. L. Heath & H. D. O'Hair (Eds.), *Handbook of risk and crisis communication* (pp. 155–179). New York, NY: Routledge.

Crook, B., Glowacki, E. M., Suran, M., K. Harris, J., & Bernhardt, J. M. (2016). Content analysis of a live CDC Twitter chat during the 2014 Ebola outbreak. *Communication Research Reports*, *33*(4), 349–355.

Dalrymple, K. E., Young, R., & Tully, M. (2016). "Facts, not fear": Negotiating uncertainty on social media during the 2014 Ebola crisis. *Science Communication*, *38*(4), 442–467.

Douglas, M., & Wildavsky, A. (2010). *Risk and culture: An essay on the selection of technological and environmental dangers* (1. paperback printing, 1983, [Nachdr.]). Berkeley, Calif.: Univ. of California Press.

Drews, J. (2018). *Risikokommunikation und Krisenkommunikation: Kommunikation von Behörden und die Erwartungen der Journalisten.* Wiesbaden: Springer VS.

Earle, T. C. (2010). Trust in risk management: A model-based review of empirical research. *Risk Analysis, 30,* 541–574.

Earle, T. C., & Cvetkovich, G. (1995). *Social trust: Toward a cosmopolitan society*. Westport, CT: Praeger.

Eriksson, L. (2017). Components and drivers of long-term risk communication: Exploring the within-communicator, relational, and content dimensions in the Swedish forest context. *Organization & Environment*, *30*(2), 162–179.

Eriksson, M. (2018). Lessons for crisis communication on social media: A systematic review of what research tells the practice. *International Journal of Strategic Communication*, *12*(5), 526–551.

Fitzpatrick-Lewis, D., Yost, J., Ciliska, D., & Krishnaratne, S. (2010). Communication about environmental health risks: A systematic review. *Environmental Health: A Global Access Science Source*, *9*, 67.

Frandsen, W., & Johansen, W. (2020). Public sector communication: Risk and crisis communication. In V. Luoma-Aho & M. J. Canel (Eds.), *Handbooks on communication and media. The handbook of public sector communication* (pp. 229–244). Hoboken, NJ: Wiley, Blackwell.

Frewer, L. J., Scholderer, J., & Bredahl, L. (2003). Communicating about the risks and benefits of genetically modified foods: The mediating role of trust. *Risk Analysis*, *23*(6), 1117–1133.

Frewer, L. J., Fischer, A. R. H., Brennan, M., Bánáti, D., Lion, R., Meertens, R. M. … Vereijken, C. M. J. L. (2016). Risk/benefit communication about food - A systematic review of the literature. *Critical Reviews in Food Science and Nutrition*, *56*(10), 1728–1745.

Gerken, F., & van der Meer, T. (2019). Crisis frame dynamics: Frame diversity in news media and the role of governmental actors. *Journal of International Crisis and Risk Communication Research*, *2*(2), 149–180.

Gesser-Edelsburg, A., Mordini, E., James, J. J., Greco, D., & Green, M. S. (2014). Risk communication recommendations and implementation during emerging infectious diseases: A case study of the 2009 H1N1 influenza pandemic. *Disaster Medicine and Public Health Preparedness*, 1–12.

Gesser-Edelsburg, A., Stolero, N., Mordini, E., Billingsley, M., James, J. J., & Green, M. S. (2015). Emerging infectious disease (EID) communication during the 2009 H1N1 influenza outbreak: Literature review (2009-2013) of the methodology used for EID communication analysis. *Disaster Medicine and Public Health Preparedness*, *9*(2), 199–206.

Guidry, J. P. D., Jin, Y., Orr, C. A., Messner, M., & Meganck, S. (2017). Ebola on Instagram and Twitter: How health organizations address the health crisis in their social media engagement. *Public Relations Review*, *43*(3), 477–486.

Gurabardhi, Z., Gutteling, J. M., & Kuttschreuter, M. (2004). The development of risk communication: An empirical analysis of the literature in the field. *Science Communication*, *25*(4), 323–349.

Gurabardhi, Z., Gutteling, J. M., & Kuttschreuter, M. (2005). An empirical analysis of communication flow, strategy and stakeholders' participation in the risk communication literature 1988–2000. *Journal of Risk Research*, *8*(6), 499–511.

Hallahan, K., Holtzhausen, D., van Ruler, B., Verčič, D., & Sriramesh, K. (2007). Defining strategic communication. *International Journal of Strategic Communication 1*(1), 3–35.

Heath, R. L. (2018). Risk management and communication. In R. L. Heath, W. Johansen, & J. Falkheimer (Eds.), *The Wiley Blackwell-ICA international encyclopedias of communication. The international encyclopedia of ctrategic communication* (pp. 1–15). Hoboken, NJ: Wiley.

Heath, R. L., Johansen, W., Hallahan, K., Steyn, B., Falkheimer, J., & Raupp, J. J. C. (2018). Strategic communication. In R. L. Heath, W. Johansen, & J. Falkheimer (Eds.), *The Wiley Blackwell-ICA international encyclopedias of communication. The international encyclopedia of strategic communication* (Vol. 35, pp. 1–24). Hoboken, NJ: Wiley.

Herger, N. (2006). *Vertrauen und Organisationskommunikation: Identität, Marke, Image, Reputation.* Wiesbaden: VS Verlag für Sozialwissenschaften.

Holtzhausen, D., & Zerfass, A. (2015). Strategic communication: Opportunities and challenges of the research area. In D. Holtzhausen & A. Zerfaß (Eds.), *Routledge handbooks. The Routledge handbook of strategic communication* (pp. 3–17). New York, NY: Routledge.

Knight, F. H. (2006). *Risk, uncertainty and profit.* Mineola, NY: Dover. (Original work published 1916).

Kott, A., & Limaye, R. J. (2016). Delivering risk information in a dynamic information environment: Framing and authoritative voice in centers for disease control (CDC) and primetime broadcast news media communications during the 2014 Ebola outbreak. *Social Science & Medicine (1982), 169,* 42–49.

Kuhlicke, C., Callsen, I., & Begg, C. (2016). Reputational risks and participation in flood risk management and the public debate about the 2013 flood in Germany. *Environmental Science & Policy*, *55*, 318–325.

Liao, Q., Yuan, J., Dong, M., Yang, L., Fielding, R., & Lam, W. W. T. (2020). Public engagement and government responsiveness in the communications about COVID-19 during the early epidemic stage in china: Infodemiology study on social media data. *Journal of Medical Internet Research, 22*(5), e18796.

Lundgren, R., & McMakin, A. (2018). *Risk communication. Handbook for communicating environmental, safety, and health risks* (6th ed.). Hoboken, New Jersey: IEE Press: Wiley.

Liu, B. F., & Kim, S. (2011). How organizations framed the 2009 H1N1 pandemic via social and traditional media: Implications for U.S. health communicators. *Public Relations Review*, *37*(3), 233–244.

Lwin, M. O., Lu, J., Sheldenkar, A., & Schulz, P. J. (2018). Strategic uses of Facebook in Zika outbreak communication: Implications for the crisis and emergency risk communication model. *International Journal of Environmental Research and Public Health*, *15*(9), 1974–1993.

Lyu, S.-Y., Chen, R.-Y., Wang, S.-f. S., Weng, Y.-L., Peng, E. Y.-C., & Lee, M.-B. (2013). Perception of spokespersons' performance and characteristics in crisis communication: Experience of the 2003 severe acute respiratory syndrome outbreak in Taiwan. *Journal of the Formosan Medical Association = Taiwan Yi Zhi*, *112*(10), 600–607.

McComas, K. A. (2006). Defining moments in risk communication research: 1996-2005. *Journal of Health Communication*, *11*(1), 75–91.

Mello, S. (2017). Risk communication. In M. Allen (Ed.), *The SAGE encyclopedia of communication research methods* (pp. 1514–1517). Thousand Oaks: SAGE Publications.

National Research Council (1989). *Improving risk communication*. National Academies.

Ophir, Y. (2018). Coverage of epidemics in American newspapers through the lens of the crisis and emergency risk communication framework. *Health Security*, *16*(3), 147–157.

Palenchar, M. J. (2010). Risk communication. In R. L. Heath (Ed.), *The SAGE handbook of public relations* (pp. 447–460). Thousand Oaks: Sage.

Palenchar, M. J., & Heath, R. L. (2006). Responsible advocacy through strategic risk communication. In K. R. Fitzpatrick & C. Bronstein (Eds.), *Ethics in public relations: Responsible advocacy* (pp. 131–154). Thousand Oaks: SAGE Publications.

Palenchar, M. J., & Heath, R. L. (2007). Strategic risk communication: Adding value to society. *Public Relations Review 33*(2), 120–129.

Pidgeon, N. F., Slovic, P., & Kasperson, R. E. (Eds.) (2003). *The social amplification of risk*. Cambridge: Cambridge University Press.

Rahim, A. I., Ibrahim, M. I., A Salim, F. N., & Ariffin, M. A. I. (2019). Health information engagement factors in Malaysia: A content analysis of Facebook use by the ministry of health in 2016 and 2017. *International Journal of Environmental Research and Public Health*, *16(4)*, 591–602.

Raupp, J. (2014). Social agents and news media as risk amplifiers: A case study on the public debate about the E. Coli outbreak in Germany 2011. *Health, Risk & Society*, *16*(6), 565–579.

Raupp, J. (2015). Strategizing risk communication. In D. Holtzhausen & A. Zerfaß (Eds.), *Routledge handbooks. The Routledge handbook of strategic communication* (pp. 520–532). New York, NY: Routledge.

Renn, O. (2010). Risk communication: Insights and requirements for designing successful communication programs on health and environmental hazards. In R. L. Heath (Ed.), *Routledge communication Series. Handbook of risk and crisis communication* (pp. 92–110). New York, NY: Routledge.

Renn, O., & Levine, D. (1991). Credibility and trust in risk communication. In R. E. Kasperson & J. Stallen (Eds.), *Communicating risks to the public* (pp. 175–217). The Hague: Klewer.

Reynolds, B., & Seeger, M. (2005). Crisis and emergency Risk communication as an integrative model. *Journal of Health Communication*, *10*(1), 43–55.

Reynolds, B. J. (2009). Building trust through social media. CDC's experience during the H1N1 influenza response. *Marketing Health Services*, *30*(2), 18–21.

Roberts, H., & Veil, S. R. (2016). Health literacy and crisis: Public relations in the 2010 egg recall. *Public Relations Review*, *42*(1), 214–218.

Robinson, S. J., & Newstetter, W. C. (2003). Uncertain science and certain deadlines: CDC responses to the media during the Anthrax attacks of 2001. *Journal of Health Communication*, *8 Suppl 1*, 17–34; discussion 148–151.

Rossmann, C., Meyer, L., & Schulz, P. J. (2018). The mediated amplification of a crisis: Communicating the A/H1N1 pandemic in press releases and press coverage in Europe. *Risk Analysis: An Official Publication of the Society for Risk Analysis*, *38*(2), 357–375.

Röttger, U. (2019). Vertrauen und Glaubwürdigkeit in der Unternehmenskommunikation. In A. Zerfaß, M., Piwinger, & U. Röttger (Hrsg.), *Handbuch Unternehmenskommunikation: Strategie – Management – Wertschöpfung* (3. Aufl., S. 1–20). Wiesbaden: Springer Fachmedien Wiesbaden.

Rowe, G., & Frewer, L. J. (2005). A Typology of public engagement mechanisms. *Science, Technology, & Human Values*, *30*(2), 251–290.

Ruzza, M., Tiozzo, B., Rizzoli, V., Giaretta, M., D'Este, L., & Ravarotto, L. (2020). Food risks on the web: Analysis of the 2017 fipronil alert in the italian online information sources. *Risk Analysis: An Official Publication of the Society for Risk Analysis, 40*(10), 2071–2092.

Schultz, F., Kleinnijenhuis, J., Oegema, D., Utz, S., & van Atteveldt, W. (2012). Strategic framing in the BP crisis: A semantic network analysis of associative frames. *Public Relations Review*, *38*(1), 97–107.

Sellnow, T. L., Ulmer, R. R., Seeger, M. W., & Littlefield, R. (2009). *Effective risk communication: A message-centered approach.* New York: Springer.

Slavik, C. E., Buttle, C., Sturrock, S. L., Darlington, J. C., & Yiannakoulias, N. (2021). Examining tweet content and engagementof canadian public health agencies and decision makers during COVID-19: mixed methods analysis. *Journal of Medical InternetResearch, 23*(3), e24883.

Slovic, P. (2011). *The perception of risk* (Repr. ed.). London [u. a.]: Earthscan.

Smillie, L., & Blissett, A. (2010). A model for developing risk communication strategy. *Journal of Risk Research*, *13*(1), 115–134.

Sopory, P., Day, A. M., Novak, J. M., Eckert, K., Wilkins, L., Padgett, D. R. … Gamhewage, G. M. (2019). Communicating uncertainty during public health emergency events: A systematic review. *Review of Communication Research*, *7*, 67–108.

Strekalova, Y. A. (2017). Health risk information engagement and amplification on social media. *Health Education & Behavior: The Official Publication of the Society for Public Health Education*, *44*(2), 332–339.

Sutton, J., Vos, S. C., Olson, M. K., Woods, C., Cohen, E., Gibson, B. A., … Carter, T. B. (2018). Lung cancer messages on Twitter: Content analysis and evaluation. *Journal of the American College of Radiology: JACR*, *15*(1 Pt B), 210–217.

Sutton, J., Renshaw, S. L., & Butts, C. T. (2020). The first 60 days: American public health agencies' social media strategies inthe emerging COVID-19 pandemic. *Health Security, 18*(6), 454–460. https://doi.org/10.1089/hs.2020.0105.

Tampere, P., Tampere, K., & Luoma-Aho, V. (2016). Facebook discussion of a crisis: Authority communication and its relationship to citizens. *Corporate Communications: An International Journal*, *21*(4), 414–434.

Thomas, T. L., Schrock, C., & Friedman, D. B. (2016). Providing health consumers with emergency information: A systematic review of research examining social media use during public crises. *Journal of Consumer Health on the Internet*, *20*(1-2), 19–40.

Toni, G.L.A., van der Meer, P., & Verhoeven, P. (2013). Public framing organizational crisis situations: Social media versus newsmedia. *Public Relations Review 39*(3), 229–231. https://doi.org/10.1016/j.pubrev.2012.12.001.

Toppenberg-Pejcic, D., Noyes, J., Allen, T., Alexander, N., Vanderford, M., & Gamhewage, G. (2019). Emergency risk communication: Lessons learned from a rapid review of recent grey literature on Ebola, Zika, and Yellow Fever. *Health Communication*, *34*(4), 437–455.

Upreti, B. R., & van der Horst, D. (2004). National renewable energy policy and local opposition in the UK: The failed development of a biomass electricity plant. *Biomass and Bioenergy*, 26(1), 61–69.

van de Brug, F. J., Lucas Luijckx, N. B., Cnossen, H. J., & Houben, G. F. (2014). Early signals for emerging food safety risks: From past cases to future identification. *Food Control*, 39, 75–86.

van der Meer, T. G.L.A. (2016). Automated content analysis and crisis communication research. *Public Relations Review*, *42*(5), 952–961.

van der Vegt, R. G. (2018). A literature review on the relationship between risk governance and public engagement in relation to complex environmental issues. *Journal of Risk Research*, *21*(11), 1–18.

Veil, S., Reynolds, B., Sellnow, T. L., & Seeger, M. W. (2008). CERC as a theoretical framework for research and practice. *Health Promotion Practice, 9*(4 Suppl), S. 26–34.

Wagner-Egger, P., Bangerter, A., Gilles, I., Green, E., Rigaud, D., Krings, F., Staerklé, C., & Clémence, A. (2011). Lay perceptions of collectives at the outbreak of the H1N1 epidemic: Heroes, villains and victims. *Public Understanding of Science (Bristol, England), 20*(4), 461–476.

Ju, Y., Lim, J., Shim, M., & You, M. (2015). Outrage factors in government press releases of food risk and their influence on news media coverage. *Journal of Health Communication, 20*(8), 879–887.

Angela Osterheider ist Referentin bei der Berlin University Alliance (Objective 2/Fostering Knowledge Exchange). Ihre Forschungsschwerpunkte sind Risiko- und Wissenschaftskommunikation, partizipative Kommunikation und Kommunikationsethik.

Content Analysis in Research on User-Generated Media Content [Die Inhaltsanalyse in der Forschung zu User-generierten Inhalten]



Content Analysis in the Research Field of Online User Comments

Teresa K. Naab und Constanze Küchler

1 Introduction

The digitalization and related socio-technological innovations enable online users to actively engage in the creation and distribution of online content. Alongside this development, the scholarly interest in user-generated content has established a flourishing and growing field of research (Naab and Sehl 2017). One of the most widespread forms of public user-generated content are user comments (Newman et al. 2019; Stroud et al. 2016). User comments originate when users take the opportunity to post written messages stimulated by a news item (e.g., news article or video). They are published either in comment sections on websites or on the social media pages of news outlets (e.g., Facebook page of *Frankfurter Allgemeine Zeitung*). As soon as more users engage in commenting on the same news item and referencing others' comments, an online discussion develops (Ziegele and Quiring 2013). The news outlets provide a selection of topics along journalistic criteria that are relevant to society and reach a potentially large audience. At the same time, they retain the decision-making power over the user comments published in their comment sections and can moderate or delete undesired comments or limit the comment sections to selected topics (Weber 2014).

C. Küchler
Institut für Medien, Wissen und Kommunikation, Universität Augsburg,
Augsburg, Germany
E-Mail: constanze.kuechler@uni-a.de

T. K. Naab (✉)
Institute of Media and Communication Studies, University of Mannheim,
Mannheim, Germany
E-Mail: naab@uni-mannheim.de

F. Oehmer-Pedrazzi et al. (Hrsg.), *Standardisierte Inhaltsanalyse in der Kommunikationswissenschaft – Standardized Content Analysis in Communication Research,* https://doi.org/10.1007/978-3-658-36179-2_37

Research examines user comments from a broad variety of perspectives. It investigates content characteristics (see below), comment authors (e.g., Springer 2014), regulation practices of harmful content (e.g., Heldt 2019; Stroud et al. 2015; Ziegele et al. 2019), and journalists' and editors' engagement with user comments (e.g., Meyer and Carey 2014). In addition, scholars examine a multitude of effects of user comments on the readers' attitudes towards topics (e.g., Sikorski 2016) and social issues (e.g., Hwang 2018), their evaluations of journalistic content and behaviors (e.g., Naab et al. 2020). Lastly, scholars in many subfields of communication science examine user comments on specific topics of their interests. This reflects the relevance of user-generated content in the users' media repertoires (Newman et al. 2019) and the mounting evidence on the effects of user comments on attitudes and behaviors. Among these are studies in the realm of political communication (e.g., Blassnig et al. 2019), health communication (e.g., Holton et al. 2014), science communication (e.g., Koteyko et al. 2013; Kraker et al. 2014; Walter et al. 2018), and many others. Although user comments barely represent the opinion climate on issues, they are often used to assess the „pulse of the public debate" (Douai and Nofal 2012, p. 269).

2 Common Research Designs of Content Analyses and Combinations of Methods

Mostly, scholars fathom user comments' content characteristics with standardized methods: We find a multitude of standardized content analyses (see below) and a number of qualitative text analyses (e.g., on opinion dynamics on socially relevant topics, Al-Saggaf 2006; on discussion quality, Graham and Witschge 2003; on linguistic features applied during discussions, Küchler and Naab 2018; Neurauter-Kessels 2011). What is more, a growing number of studies investigates user comments with automated and semi-automated approaches (e.g., Gardiner et al. 2016; Stoll et al. 2020). The increasing importance of computational methods in communication research in recent years and the comparably easy access to large data sets of public content from social media sites contribute to this development (Possler et al. 2019). In the field of user comments, automated detection of incivility and other forms of offensive speech in user comments receive utmost attention. There are no systematic reviews of content analyses on user comments. However, in their scoping review of studies on user-generated content in general, Naab and Sehl (2017) reveal that standardized content analyses dominate over discourse analyses, text analyses, and further qualitative approaches.

Rarely, studies apply a combined approach (similarly, Naab and Sehl, 2017). For example, Graham and Wright (2015) combine a content analysis of online discussions with qualitative interviews with journalists. Ziegele et al. (2014) combine a content analysis of discussion factors in user comments with qualitative interviews with users.

Cross-sectional analyses clearly dominate over longitudinal analyses (similarly, Naab and Sehl 2017), but exceptions provide valuable insights (e.g., Gardiner et al., 2016;

Kraker et al., 2014; Wright et al. 2020). Comparisons between cultures, countries, or language regions constitute a minority within the field of content analyses (Naab and Sehl 2017; for an exception see Ruiz et al. 2011).

In content analytic studies of user comments, several researchers investigate contextual influences. For instance, they examine the effects of the discourse architecture of the platform hosting the comment section. For this reason, they compare comment sections on news websites with those on news outlets' social media pages (Rowe 2014; Ziegele et al. 2014) or compare comment sections with differences in user registration, anonymity, moderation strategies, ethical frameworks, and various technological features (Freelon 2015; Ksiazek 2015; Ruiz et al. 2011; Santana 2014). Another context factor of interest is the news item that attracts the comments. Yet most studies restrain themselves to the influence of journalistic features on the amount of comments (e.g., on the influence of news topics, Almgren and Olsson, 2015; Liu et al. 2015; Tenenboim and Cohen 2015; of news factors in the articles, Weber 2014; of the deliberative quality of the articles, Marzinkowski and Engelmann 2018).

With regard to sampling it is fair to state that user comments on Facebook pages catch overwhelming scholarly attention (Jünger, in prep.). This can be attributed to the development that many news outlets have shifted their comment sections to Facebook (Su et al. 2018) and that Facebook is still among the most widely used social media platforms for news consumption (Pew Research Center 2015). Furthermore, Facebook has provided comparably easy access to its public content in the past. Additional studies (often undertaken by journalism scholars) focus on comment sections on the websites of news outlets. Be that as it may, other platforms have received much less attention (see for exceptions, e.g., analyses of YouTube comments, Djerf-Pierre et al. 2019).

Very rarely, content analyses are conducted as part of experimental designs. For example, in a field experiment, Stroud et al. (2015) varied, who engaged with the users of a comment section. They analyzed the effects on the quality of the succeeding comments. In a few laboratory experiments, scholars manipulated comments in a thread and content analyzed the responses of their participants (e.g., Chen and Lu 2017; Naab 2020).

3 Theoretical Frameworks and Main Constructs

Regarding content characteristics of user comments, the most prevalent theoretical framework is deliberation theory (Freelon 2015). This strand of research analyzes how far online discussions come close to the normative ideal of deliberative discussions (often referring to the notions of deliberation by Barber 1984; Gastil 2008; Habermas 1989). It claims that deliberative online discussions should include diverse viewpoints; participants should present well-reasoned arguments on the substantial issue; discussions should provide equal opportunity to speak for all; participants should refer to one another reciprocally and consider the others' arguments while being respectful and authentic.

Studies investigate the heterogeneity of views in comment sections and views complement to the standpoints offered in the news articles they accompany. While some researchers claim that comments complement the journalistic products (Baden and Springer 2014; Douai and Nofal 2012; Jakobs 2014), others are more skeptical and find that comments rarely contain alternative opinions or complementary standpoints (Noci et al. 2010; Toepfl and Piwoni 2015).

Analyses of user comments' valence reveal that comments on websites and Facebook pages of news media outlets are predominantly adverse and critical (Coe et al. 2014). They criticize aspects such as a lack of facticity and impartiality (Prochazka and Schweiger, 2016).

Further, research indicates that online discussions can present well-reasoned **arguments and facts** (e.g., by citing sources to back up claims, Graham and Wright 2015). However, several studies suggest that emotions dominate online discussions (Jakobs 2014; Lilienthal et al. 2014; Loveland and Popescu 2011; Taddicken and Bund 2010).

The interactive **character** of online discussion through reciprocal exchange between participants is a further matter of many analyses: Scholars examine the **amount of reply comments,** references to **other users, journalists, or the** content of **other comments** (Graham and Wright 2015). Whether other users' views are reflected, is also examined by analyzing if comments pose questions (Graham and Wright 2015; Manosevitch and Walker 2009). Interactivity is rather low, since comment authors exchange with others only to a limited extent and dialogues between authors end after a few comments (Jakobs 2014; Loveland and Popescu 2011; Noci et al. 2010; Singer 2009; Ziegele et al. 2014).

Overwhelming scholarly attention is devoted to the analysis of uncivil **and otherwise disrespectful speech** in user comments (on the term incivility, Papacharissi 2004). This is in line with public debates about detrimental effects of offensive content in social media and about opportunities to regulate such content. Several empirical investigations show, depending on their study design, their measurement of incivility, and sampling technique, that up to 50 percent of the comments include personal attacks, obscenities, racism, sexism, and other forms of offensive speech (Coe et al. 2014; Diakopoulos and Naaman 2011a, 2011b; Ksiazek 2015; Noci et al. 2010; Ruiz et al. 2011). Yet, researchers support that, at least at the beginning of comment threads, discussions are coherent and focus on the issue under debate (Belli et al. 2000; Graham and Wright 2015; Noci et al. 2010; Ruiz et al. 2011). User comments mostly are assessed as mediocrely comprehensible and correct in language, grammar, and style (Jakobs 2014).

Besides analyses that are (more or less explicitly) tied to the normative concept of deliberation, studies also consider so-called discussion factors in user comments. They follow the idea of news factors in journalists' news selection and presentation (Galtung and Ruge 1965). Ziegele et al. (2014) argue that "specific message characteristics in user comments stimulate response comments from subsequent users" (p. 1114). Among these characteristics are controversy, personalization, uncertainty, unexpectedness, **comprehensibility**, and negativity.

Aside from the actual content of the user comments themselves, scholars also investigate assumptions about the authors of such comments. For example, they code the gender **of authors** (e.g., in studies on the relationship between author gender and writing or receiving incivility, Gardiner et al. 2016; Küchler et al. 2019) or the professional status of participants (e.g., in studies on the engagement of journalists in the comment sections, Jakobs 2014; Wright et al. 2020).

4 Research Desiderata

Despite the extensive empirical literature, it is advisable to point out some desiderata of the existing field of research: Most studies refer to online discussions in Western cultures and only rarely do scholars take the effort to compare findings across countries or cultures. In their sample selection, most studies refer to user comments in the comment sections of the most read news outlets. While this is understandable considering that these comments will also have greater reach and potential effects, it disregards potential deviations in comment sections of less popular outlets. These might also have different discourse architectures, readers, and commenting patterns. The generalizability of the findings is further limited because user comments on Facebook pages of news outlets receive overproportionate attention while other social media platforms like YouTube, TikTok, or Instagram are barely examined.

With regard to the dimensions under investigation, Freelon (2015) argues for a closer examination of normative frameworks besides deliberation theory such as liberal individualism or communitarianism. Additionally, many researchers focus on detecting and describing forms of incivility and related forms of disrespectful speech in comments. While the social significance of these studies is uncontested, it should not divert scholarly attention from further characteristics of online discussions.

Relevant Variables in DOCA – Database of Variables for Content Analysis

Arguments: https://doi.org/10.34778/5d
Clarity: https://doi.org/10.34778/5e
Number of reply comments: https://doi.org/10.34778/5f

Funding Information: This research was funded by the German Research Foundation, Grant NA 1281/1-1, project number 358324049

References

Almgren, S. M., & Olsson, T. (2015). 'Let's get them involved'... to some extent: Analyzing online news participation. *Social Media + Society, 1*(2).

Al-Saggaf, Y. (2006). The online public sphere in the Arab world: The war in Iraq on the Al Arabiya website. *Journal of Computer-Mediated Communication*, *12*(1), 311–334.

Baden, C., & Springer, N. (2014). Com(ple)menting the news on the financial crisis: The contribution of news users' commentary to the diversity of viewpoints in the public debate. *European Journal of Communication*, *29*(5), 529–548.

Barber, B. (1984). *Strong democracy. Participatory politics for a new age*. Berkeley, CA: University of California Press.

Belli, R. F., Schwarz, N., Singer, E., & Talarico, J. (2000). Decomposition can harm the accuracy of behavioural frequency reports. *Applied Cognitive Psychology*, *14*(4), 295–308.

Blassnig, S., Engesser, S., Ernst, N., & Esser, F. (2019). Hitting a nerve: Populist news articles lead to more frequent and more populist reader comments. *Political Communication*, *36*(4), 629–651.

Chen, G. M., & Lu, S. (2017). Online political discourse: Exploring differences in effects of civil and uncivil disagreement in news website comments. *Journal of Broadcasting & Electronic Media*, *61*(1), 108–125.

Coe, K., Kenski, K., & Rains, S. A. (2014). Online and uncivil? Patterns and determinants of incivility in newspaper website comments. *Journal of Communication*, *64*(4), 658–679.

Diakopoulos, N., & Naaman, M. (2011a). Topicality, time, and sentiment in online news comments. In D. Tan (Ed.), *Proceedings of the CHI Conference on Human Factors in Computing Systems* (pp. 1405–1410). New York, NY: ACM.

Diakopoulos, N., & Naaman, M. (2011b). Towards quality discourse in online news comments. In P. J. Hinds, J. C. Tang, J. Wang, J. Bardam, & N. Ducheneaut (Eds.), *Proceedings of the ACM 2011 Conference on Computer Supported Cooperative Work* (pp. 133–142). New York, NY: ACM.

Djerf-Pierre, M., Lindgren, M., & Budinski, M. A. (2019). The role of journalism on YouTube: Audience engagement with 'superbug' reporting. *Media and Communication*, *7*(1), 235–247.

Douai, A., & Nofal, H. K. (2012). Commenting in the online Arab public sphere: Debating the Swiss minaret ban and the "Ground Zero Mosque" online. *Journal of Computer-Mediated Communication*, *17*(3), 266–282.

Freelon, D. (2015). Discourse architecture, ideology, and democratic norms in online political discussion. *New Media & Society*, *17*(5), 772–791.

Galtung, J., & Ruge, M. H. (1965). The structure of foreign news: The presentation of the Congo, Cuba and Cyprus crises in four Norwegian newspapers. *Journal of Peace Research*, *2*(1), 64–90.

Gardiner, B., Mansfield, M., Anderson, I., Holder, J., Louter, D., & Ulmanu, M. (2016). The dark site of Guardian comments. Retrieved from https://www.theguardian.com/technology/2016/apr/12/the-dark-side-of-guardian-comments.

Gastil, J. (2008). *Political communication and deliberation*. Thousand Oaks, CA: Sage.

Graham, T., & Witschge, T. (2003). In search of online deliberation: Towards a new method for examining the quality of online discussions. *Communications*, *28*(2), 173–204.

Graham, T., & Wright, S. (2015). A tale of two stories from "below the line". *The International Journal of Press/Politics*, *20*(3), 317–338.

Habermas, J. (1989). *The structural transformation of the public sphere*. Cambridge: MIT.

Heldt, A. (2019). Reading between the lines and the numbers: An analysis of the first NetzDG reports. *Internet Policy Review*, *8*(2).

Holton, A., Lee, N., & Coleman, R. (2014). Commenting on health: A framing analysis of user comments in response to health articles online. *Journal of Health Communication*, *19*(7), 825–837.

Hwang, H., Kim, Y., & Kim, Y. (2018). Influence of discussion incivility on deliberation: An examination of the mediating role of moral indignation. *Communication Research*, *45*(2), 213–240.

Jakobs, I. (2014). Diskutieren für mehr Demokratie [Discussing for more democracy]? In W. Loosen & M. Dohle (Eds.), *Journalismus und (sein) Publikum* [Journalism and (its) audience] (pp. 191–210). Wiesbaden: Springer.

Jünger, J. (in prep.). Die Macht der APIs. Online-Plattformen als Kontextfaktoren wissenschaftlicher Forschung [The power of APIs. Online platforms as context factors of scientific research]. In A. Kostiučenko & M. Kuhnhenn (Eds.), *Die Macht des Kontextes* [The power of context]. Berlin: De Gruyter.

Koteyko, N., Jaspal, R., & Nerlich, B. (2013). Climate change and 'climategate' in online reader comments: a mixed methods study. *The Geographical Journal*, *179*(1), 74–86.

Kraker, J. de Kuijs, S., Cörvers, R., & Offermans, A. (2014). Internet public opinion on climate change: a world views analysis of online reader comments. *International Journal of Climate Change Strategies and Management*, *6*(1), 19–33.

Ksiazek, T. B. (2015). Civil interactivity: How news organizations' commenting policies explain civility and hostility in user comments. *Journal of Broadcasting & Electronic Media*, *59*(4), 556–573.

Küchler, C., & Naab, T. K. (2018, November). *User interactions during online conflict. Discussions in comment sections between norm negotiation, personal offenses, and fake profile accusations*. Paper presented at conference of the European Communication Research and Education Association, Prag, Czechia.

Küchler, C., Stoll, A. Ziegele, M., & Naab, T. K. (2022). Gender-related differences in online comment sections: Findings from a large-scale content analysis of commenting behavior. *Social Science Computer Review.* https://doi.org/10.1177/08944393211052042.

Lilienthal, V., Weichert, S., Reineck, D., Sehl, A., & Worm, S. (2014). *Digitaler Journalismus: Dynamik – Teilhabe – Technik* [Digital journalism: Dynamic - participation - technology]. *Schriftenreihe Medienforschung der Landesanstalt für Medien Nordrhein-Westphalen*. Leipzig: Vistas.

Liu, Q., Zhou, M., & Zhao, X. (2015). Understanding news 2.0: A framework for explaining the number of comments from readers on online news. *Information & Management*, *52*(7), 764–776.

Loveland, M. T., & Popescu, D. (2011). Democracy on the web. *Information, Communication & Society*, *14*(5), 684–703.

Manosevitch, E., & Walker, D. (2009, April). *Reader comments to online opinion journalism: A space of public deliberation*. 10th International Symposium on Online Journalism, Austin, TX.

Marzinkowski, H., & Engelmann, I. (2018). Die Wirkung „guter" Argumente [The effect of "good" arguments]. *Publizistik*, *63*(2), 269–287.

Meyer, H. K., & Carey, M. C. (2014). In moderation. *Journalism Practice*, *8*(2), 213–228.

Naab, T. K. (March, 2020). *Effekte von Feedback-Kommentaren auf die Autor*innen bewerteter Nutzerkommentare* [Effects of feedback comments on the authors of evaluated user comments]. Paper presented at the Annual Conference of the German Communication Association, Munich, Germany.

Naab, T. K., Heinbach, D., Ziegele, M., & Grasberger, M.-T. (2020). Comments and credibility: How critical user comments decrease perceived news article credibility. *Journalism Studies*, *216*(4), 1–19.

Naab, T. K., & Sehl, A. (2017). Studies of user-generated content: A systematic review. *Journalism*, *18*(10), 1256–1273.

Neurauter-Kessels, M. (2011). Im/polite reader responses on British online news sites. *Journal of Politeness Research. Language, Behaviour, Culture*, *7*(2), 187–214.

Newman, N., Fletcher, R., & Kalogeropoulos, A. (2019). Reuters Institute Digital News Report 2019. Retrieved from https://reutersinstitute.politics.ox.ac.uk/sites/default/files/inline-files/DNR_2019_FINAL.pdf.

Noci, J. D., Domingo, D., Masip, P., Micó, J. L., & Ruiz, C. (2010). Comments in news, democracy booster or journalistic nightmare: Assessing the quality and dynamics of citizen debates in Catalan online newspapers. *International Symposium on Online Journalism*, *2*(1), 46–64.

Papacharissi, Z. (2004). Democracy online: civility, politeness, and the democratic potential of online political discussion groups. *New Media & Society*, *6*(2), 259–283.

Pew Research Center (2015, July 14). The evolving role of news on Twitter and Facebook. Retrieved from http://www.journalism.org/files/2015/07/Twitter-and-News-Survey-Report-FINAL2.pdf.

Possler, D., Bruns, S., & Niemann-Lenz, J. (2019). Data is the new oil - but how do we drill it? Pathways to access and acquire large data sets in communication science. *International Journal of Communication, 13*, 3894–3911.

Prochazka, F., & Schweiger, W. (2016). Medienkritik online: Was kommentierende Nutzer am Journalismus kritisieren [Media criticism online: What commenters criticize about journalism]. *Studies in Communication and Media*, *5*(4), 454–469.

Rowe, I. (2014). Civility 2.0: A comparative analysis of incivility in online political discussion. *Information, Communication & Society*, *18*(2), 121–138.

Ruiz, C., Domingo, D., Mico, J. L., Diaz-Noci, J., Meso, K., & Masip, P. (2011). Public sphere 2.0? The democratic qualities of citizen debates in online newspapers. *The International Journal of Press/Politics*, *16*(4), 463–487.

Santana, A. D. (2014). Virtuous or vitriolic: The effect of anonymity on civility in online newspaper reader comment boards. *Journalism Practice*, *8*(1), 18–33.

Sikorski, C. von (2016). The effects of reader comments on the perception of personalized scandals: Exploring the roles of comment valence and commenters' social status. *International Journal of Communication*, *10*, 4480–4501.

Singer, J. B. (2009). Separate spaces: Discourse about the 2007 Scottish elections on a national newspaper web site. *The International Journal of Press/Politics*, *14*(4), 477–496.

Springer, N. (2014). *Beschmutzte Öffentlichkeit?: Warum Menschen die Kommentarfunktion auf Online-Nachrichtenseiten als öffentliche Toilettenwand benutzen, warum Besucher ihre Hinterlassenschaften trotzdem lesen, und wie die Wände im Anschluss aussehen* [Soiled public?: Why people use the commentary function on online news sites as a public toilet wall, why visitors read their legacies anyway, and what the walls look like afterwards]. München: Lit.

Stoll, A., Ziegele, M., & Quiring, O. (2020). Detecting impoliteness and incivility in online discussions: Classification approaches for German user comments. *Computational Communication Research, 2*(1), 109–134.

Stroud, N. J., Scacco, J. M., Muddiman, A., & Curry, A. L. (2015). Changing deliberative norms on news organizations' Facebook sites. *Journal of Computer-Mediated Communication*, *20*(2), 188–203.

Stroud, N. J., van Duyn, E., & Peacock, C. (2016). Survey of commenters and comment readers. Retrieved from https://mediaengagement.org/research/survey-of-commenters-and-comment-readers/.

Su, L. Y.-F., Xenos, M. A., Rose, K. M., Wirz, C., Scheufele, D. A., & Brossard, D. (2018). Uncivil and personal? Comparing patterns of incivility in comments on the Facebook pages of news outlets. *New Media & Society*, *20*(10), 3678–3699.

Taddicken, M., & Bund, K. (2010). Ich kommentiere, also bin ich. Community Research am Beispiel des Diskussionsforums der ZEITOnline [I comment, therefore I am. Community research using the example of the ZEITOnline discussion forum]. In M. Welker & C. Wünsch (Eds.), *Die Online-Inhaltsanalyse. Forschungsobjekt Internet* [The online content analysis. Research object ‚internet'] (pp. 167–190). Köln: von Halem.

Tenenboim, O., & Cohen, A. A. (2015). What prompts users to click and comment: A longitudinal study of online news. *Journalism*, *16*(2), 198–217.

Toepfl, F., & Piwoni, E. (2015). Public spheres in interaction: Comment sections of news websites as counterpublic spaces. *Journal of Communication*, *65*(3), 465–488.

Walter, S., Brüggemann, M., & Engesser, S. (2018). Echo chambers of denial: Explaining user comments on climate change. *Environmental Communication*, *12*(2), 204–217.

Weber, P. (2014). Discussions in the comments section: Factors influencing participation and interactivity in online newspapers' reader comments. *New Media & Society*, *16*(6), 941–957.

Wright, S., Jackson, D., & Graham, T. (2020). When journalists go "below the line": Comment spaces at The Guardian (2006–2017). *Journalism Studies*, *21*(1), 107–126.

Ziegele, M., Breiner, T., & Quiring, O. (2014). What creates interactivity in online news discussions? An exploratory analysis of discussion factors in user comments on news items. *Journal of Communication*, *64*(6), 1111–1138.

Ziegele, M., Naab, T. K., & Jost, P. (2019). Lonely together? Identifying the determinants of collective corrective action against uncivil comments. *New Media & Society*, *10*. Advanced online publication. doi: https://doi.org/10.1177/1461444819870130.

Ziegele, M., & Quiring, O. (2013). Conceptualizing online discussion value. A multidimensional framework for analyzing user comments on mass-media websites. In E. L. Cohnen (Ed.), *Communication Yearbook 37* (pp. 125–153). New York, NY: Routledge.

Prof. Dr. Teresa K. Naab is professor of digital communication at the Institute of Media and Communication Studies at the University of Mannheim, Germany. She holds a PhD in communication science from the Hanover University of Music, Drama and Media, Germany. Her research focuses on computer-mediated communication, digital public spheres, and quantitative social science methods.

Constanze Küchler is a PhD student and researcher at the Department of Media, Knowledge and Communication at the University of Augsburg, Germany. She holds a Master's degree in communication science from the University of Augsburg. Her research interests include (public) online communication and health communication.


BY



Content Analysis in the Research Field of Incivility and Hate Speech in Online Communication

Katharina Esau

1 Introduction

The origins of research on incivility and hate speech can be traced back to the question of what qualities public communication should have in order to establish and maintain a democratic society (Herbst 2010; Papacharissi 2004). Democracy and public sphere theorists have presented different answers to this question and accordingly developed different concepts of civility (for an overview, see, e.g., Ferree et al. 2002; Freelon 2010). In recent years, incivility and hate speech have increasingly been observed in user-generated content (Coe et al. 2014; Rowe 2015; Stroud et al. 2015; Ziegele et al. 2017). Empirical studies have shown that incivility can generate negative emotions and responses toward others (Hwang et al. 2017; Phillips and Smith 2003, 2004), polarize users' attitudes (Anderson et al. 2014), and can even have an indirect impact on the willingness to help others (Ziegele et al., 2018b). Despite these negative effects of incivility, scholars have maintained the importance of heated (Papacharissi 2004) and cross-cutting discussion (Popan et al. 2019) and the legitimacy of conflict and disagreement for democracy (Huckfeldt et al. 2004).

Against this backdrop, detecting and explaining hateful and uncivil user comments have become a major focus in communication research. Due to the relevance of the topic and the availability of data, communication scholars are now studying incivility and hate speech across various subfields. Political communication research, for example, focuses on hate speech in the context of political discussions online and offline (Boatright et al. 2019; Coe et al. 2014; Mutz and Reeves 2005; Papacharissi 2004). The relatively young

K. Esau (✉)
Heinrich Heine Universität Düsseldorf, Düsseldorf, Germany
E-Mail: katharina.esau@hhu.de

F. Oehmer-Pedrazzi et al. (Hrsg.), *Standardisierte Inhaltsanalyse in der Kommunikationswissenschaft – Standardized Content Analysis in Communication Research,* https://doi.org/10.1007/978-3-658-36179-2_38

but growing field of online deliberation research focuses on civil, respectful, reciprocal, and reasoned online discussions from the perspective of deliberative democracy theory and examines incivility through the theoretical lens of online deliberation (Esau et al. 2017; Ziegele et al. 2018c). Furthermore, incivility research has links to science communication research because uncivil user comments are not only directed at journalism or politics but can also be directed at scientific content (Su et al. 2021; Yuan and Lu 2020). Overall, digital communication research has produced a large number of empirical studies on incivility and hate speech online (Oz et al. 2018; Poole et al. 2020; Rowe 2015; Ziegele et al. 2017).

Incivility in online discussions is deemed a challenge for democratic societies (Boatright et al. 2019; Herbst 2010). Beyond understanding and explaining the phenomenon of online hate and incivility, research in recent years has been shifting toward a greater focus on application-oriented goals. One growing research strand in the use of content analysis concerns techniques that could help reduce incivility and hate speech in online spaces through a more careful deliberative design of such spaces (Esau et al. 2017; Towne and Herbsleb 2012; Wright and Street 2007). For example, the identification of otherwise anonymous users (Rowe 2015; Santana 2013) and different styles of moderation (Stroud et al. 2015; Ziegele et al., 2018a) are promising design factors that could reduce uncivil and hateful behavior online.

In recent years, the public and scientific debate on incivility and hate speech online has focused on specific topics on the public agenda. As both incivility and hate speech can be observed in situations of disagreement or conflict, topics that provide fodder for controversial and polarized discussion have gained more attention than those deemed less sensitive. In content analyses and experimental studies, researchers have investigated incivility and hate speech in the context of morally charged, polarized, antagonistic discussions in areas such as abortion (Ferree et al. 2002; Stroud et al. 2015), climate change (Howarth and Sharman 2017; Yuan and Lu 2020), immigration (Santana 2013), refugees (Ziegele 2018b), violence (Chen et al. 2020), same-sex marriage (Oz et al. 2018), terrorism (Oz et al. 2018; Poole et al. 2020), gun control (Oz et al. 2018), and politically divisive and new technologies such as nanotechnology (Anderson et al. 2014) and fracking (Su et al. 2021). Coe et al. (2014) found that "weightier topics" and those with "clear opposing sides" (e.g., sports) tended to stir incivility. It is noteworthy that research usually focused on issues that recently emerged on the news agenda, therefore arousing particularly controversial discussion and prominence in public.

2 Definitions and Theories: Between Impoliteness and Incivility

While some scholars have argued that "sufficient consensus exists about what type of speech counts as extremely uncivil" (Massaro and Stryker, 2012, p. 406), others have pointed out that "civility is also very much in the eye of the beholder" (Herbst 2010,

p. 3). Incivility is a controversial concept and is associated with a wide spectrum of behaviors ranging from the mere expression of emotions (Su et al. 2018, 2021) to offensive and derogatory statements (Chen et al. 2020), stereotypes, and serious threats to personal rights or democracy as a whole (Papacharissi 2004; Rowe 2015). Accordingly, the existing literature provides a wide range of definitions (e.g., Anderson et al. 2014; Coe et al. 2014; Oz et al. 2018) and some classification attempts (Muddiman 2017; Papacharissi 2004; Su et al. 2021).

Correspondingly, the research landscape provides a rather rudimentary image of what is considered uncivil communication. Nevertheless, one unifying element in behavior deemed uncivil is that it has to violate an existing norm (Muddiman 2017; Papacharissi 2004; Seely 2017; Su et al. 2018, 2021). However, identifying the violated norms tends to be less clear-cut. This question is either overlooked or controversially discussed among scholars. For example, Papacharissi (2004) focused on violations of democratic norms, while, for Seely (2017), striving for social harmony is a valid social norm that, when violated, constitutes incivility. Accordingly, for Seely (2017), impoliteness and incivility are inseparable, while Papacharissi (2004) distinguished between the two.

The different definitions of incivility can be explained with different theoretical traditions and theoretical approaches that are the backbone of empirical research. On one hand, incivility research can be related to theories on social norms of communication and conversation: conversational maxims (Grice 1975), face-saving concepts (Brown and Levinson 1987; Goffman 1989), or conversational contract theories (Fraser 1990). On the other hand, incivility research has ties to democratic theories that view public communication as part of democratic opinion formation and decision-making (Dryzek 2000; Gutmann and Thompson 1990, 1996; Habermas 1984, 1994). Although researchers investigating norm violations in communication should be the last to think that communication can lead to understanding, there are numerous points of overlap between research on deliberative democracy theory and research on incivility online (Esau et al. 2017; Halpern and Gibbs 2013; Rowe 2015; Ziegele et al. 2018c; Ziegele et al. 2017).

In contrast to incivility, the term hate speech provokes less controversy among scholars. One common element is that hate speech, as the term suggests, expresses and promotes hatred toward others (Erjavec and Kovačič 2012; Rosenfeld 2012; Ziegele et al. 2018b). A second element in the literature is that hate speech is directed against others on the basis of their ethnic or national origin, religion, gender, disability, sexual orientation, or political conviction (Erjavec and Kovačič 2012; Rosenfeld 2012; Waseem and Hovy 2016). Further, it is associated with the use of terms that are considered to denigrate, degrade, and threaten others (Döring and Mohseni 2020; Gagliardone et al. 2015). However, the less controversial view on the phenomenon may be a result of the comparatively low attention that has been given to hate speech compared to incivility. Hate speech and incivility are often used synonymously as hateful speech is considered part and parcel of incivility (Ziegele et al. 2018b). Furthermore, theoretically, the two concepts have yet to be distinguished from each other.

3 Research Designs, Methods, and Method Combinations

Experimental designs (Kim and Chen 2020; Popan et al. 2019; Su et al. 2021) and content analysis (Chen et al. 2020; Papacharissi 2004; Rowe 2015), sometimes used in combination (Borah 2013; Muddiman 2017; Oz et al. 2018), are so far the most commonly used methodological approaches to investigating the prevalence and effects of hate speech and incivility in user-generated media content. Of these approaches, online experiments seem to be suitable for creating an environment in which test persons are able to experience reality-adjacent online discussions while researchers control specific variables (Oz et al. 2018; Su et al. 2021; Ziegele et al. 2018b). Comparative designs of content analysis are also able to identify important context and influence variables (Esau et al. 2017; Halpern & Gibbs 2013; Oz et al. 2018; Rowe 2015).

Manual content analysis is most commonly used in communication science (Chen et al. 2020; Papacharissi 2004; Rowe 2015; Stroud et al. 2015; Ziegele et al. 2018a; Ziegele et al. 2018c). However, one increasingly popular trend is automated content analysis, which is a collection of techniques used to automatically analyze media content. Usually, manually coded text data are used as a "training set" to develop supervised machine learning techniques and training algorithms for the automatic detection of hate speech and incivility (Stoll et al. 2020; Su et al. 2018). This can enable researchers to test and further develop procedures originally developed in computer science (Burnap and Williams 2015; Davidson et al. 2017; Waseem and Hovy 2016). Another multi-method approach combines automated data collection, initial automated preliminary analyses, and refined manual quantitative or qualitative analyses (Poole et al. 2020; Waseem and Hovy 2016). Furthermore, although rarely used, another promising approach is the combination of qualitative or quantitative content analysis and in-depth interviews (Erjavec and Kovačič 2012; Ziegele 2016). Most studies provide useful overviews of the state of the art; however, meta-analyses on hate speech and incivility online remain wanting (Ziegele et al. 2017).

4 Main Constructs, Preconditions, and Effects of Incivility

Content analyses have demonstrated that, on average, between 20 and 50% of user comments contain some form of impoliteness, incivility, or hate speech (Coe et al. 2014; Papacharissi 2004; Santana 2013; Ziegele et al. 2018c). Most content analyses regarding online hate and incivility are either case studies focusing on a single online platform or comparative studies of various online platforms. Hate speech and incivility have been studied on Usenet newsgroups (Papacharissi 2004), political blogs (Borah 2013; Seely 2017), news websites (Chen et al. 2020; Rowe 2015; Seely 2017), Facebook (Oz et al. 2018; Rowe 2015; Stoll et al. 2020; Su et al. 2018; Ziegele et al. 2018a; Ziegele et al. 2018c), Twitter (Oz et al., 2018; Poole et al., 2020; Waseem and Hovy 2016),

YouTube (Agarwal and Sureka 2014), and Wikipedia (Black et al. 2011). Examples of comparative studies include: Rowe (2015), who found higher levels of incivility in user comments on a news website compared to a news page on Facebook. In contrast to this, Esau et al. (2017), using a similar study design, found significantly more disrespectful comments on Facebook compared to news websites and a news forum. Oz et al. (2018) compared government pages on social media and found more incivility on Twitter compared to Facebook. Other studies found significant differences in the amount of incivility on different news websites depending on ideological leanings (Chen et al. 2020), geographic scope (Su et al. 2018), and country (Ruiz et al. 2011).

Papacharissi (2004) developed one of the first and most-cited coding schemes for the standardized manual content analysis of incivility. However, the analytic constructs used in the study have been controversially discussed and have resulted in a variety of analytical approaches. Despite the variety, some commonly analyzed constructs can be distilled:

- *Dimensions or levels of incivility:* Most analytical constructs take different *dimensions or levels of incivility* into account (Seely 2017; Su et al. 2018; Ziegele et al. 2018b) and are thereby divided by the question of where incivility begins, where it ends, and what it includes (Muddiman 2017; Papacharissi 2004; Seely 2017; Su et al. 2021). As previously discussed, some researchers distinguish between **impoliteness** (e.g., name calling, vulgarity) and incivility (e.g., violent threats, stereotypes) (Papacharissi 2004; Rowe 2015), while others understand impoliteness as part of incivility (Seely 2017). Another concept further distinguishes between civility, mere rudeness (e.g., insults), and extreme incivility (e.g., violent threats) (Su et al. 2018). Again, others distinguish between mere negativity, as an inevitable characteristic of disagreement, and incivility, which undermines the ideal of deliberative discussions (Ziegele et al. 2018a), or rudeness and **hate speech** (Ziegele et al. 2018b). Researchers have argued that even if negativity implies incivility, it is not because it has the same negative impacts on democracy compared to hate speech or extreme **incivility** (Su et al. 2018). However, Ziegele et al. (2018b) argued convincingly that, although negativity alone does not constitute incivility, negativity combined with a disrespectful and hostile tone can be understood as uncivil.
- *Personal vs. public-level incivility:* Furthermore, Muddiman (2017), based on Papacharissi (2004), distinguished between *personal-level incivility* as a violation of interpersonal politeness norms and *public-level incivility* as a violation of political process and deliberative norms. The study found that although personal-level incivility was perceived as more uncivil than public-level incivility, both forms of norm violation were seen as uncivil. Personal and public levels of incivility, however, seem to be overlapping concepts as uncivil or hateful comments are often expressed on a personal level, although they also concern the public level when expressed in public online discussions.

- *Multi-dimensional concepts of incivility:* The spectrum of items included in *multi-dimensional concepts of incivility* range from a simple emotional display ("you make me angry") (Su et al. 2018, 2021) to profanity (F**k;+#?**!) (Chen et al. 2020; Ziegele et al. 2018a), rudeness ("that's bullshit") (Seely 2017), sarcasm ("just killed people but you're right it's a religion of peace") (Poole et al. 2020; Seely 2017; Ziegele et al. 2018a), offensive language ("bottom feeder") (Chen et al. 2020; Seely 2017), insults ("you are too stupid to understand") (Chen et al. 2020; Seely 2017; Ziegele et al. 2018a), hot-button language ("abortion is killing") (Ferree et al. 2002), name calling ("greedy pigs") (Chen et al. 2020; Ziegele et al. 2018a), use of stereotypes ("liberal pothead," "faggot") (Chen et al. 2020; Papacharissi 2004; Rowe, 2015; Seely 2017; Ziegele et al. 2018a), violent threats to democracy ("our politicians should be shot") (Papacharissi 2004; Rowe 2015; Ziegele et al. 2018a), and threats to individual rights ("shut your mouth or I'll shut it for you") (Papacharissi 2004; Rowe 2015; Ziegele et al. 2018a). Some studies (Seely 2017) have also included other dimensions (e.g., accusation of lying), thereby supporting the impression that there is little conceptual clarity about the dimensions of incivility.
- *Characteristics of deliberative quality:* Studies on incivility or disrespect often also comparatively examine other *characteristics of deliberative quality,* for example, rationality through argumentation or reciprocity through replying to others (Black et al. 2011; Chen et al. 2020; Esau et al. 2017; Halpern and Gibbs 2013; Ziegele et al. 2018c). Study results have shown that uncivil discussions can contain rational content (e.g., arguments or evidence) (Coe et al. 2014; Popan et al. 2019).
- *Hate speech:* Analyses of hate speech show commonalities with concepts of incivility (Erjavec and Kovačič 2012; Waseem and Hovy 2016; Ziegele et al. 2018b), for example, expressions that include insults, violent threats, hatred, or discrimination. Furthermore, hate speech is directed against people on the basis of, for example, their ethnic or national origin, religion, gender, disability, sexual orientation, or political conviction (Erjavec and Kovačič 2012; Waseem and Hovy 2016).
- *Topics:* As detailed above, incivility has been examined in the context of a variety of mostly highly controversial and conflictual topics. For example, Oz et al. (2018) demonstrated that significantly more impolite and uncivil user comments were published on sensitive, morally charged topics (e.g., same-sex marriage) than on non-sensitive topics (e.g., technology).
- *Effects of incivility:* Despite this not being the main focus, some studies employing standardized content analysis are interested in the effects of incivility on user-generated online discussions. For example, a few studies have demonstrated that uncivil and aggressive comments can increase negative emotions, negative responses, and overall user engagement (Coe et al. 2014; Hwang et al. 2017; Ziegele et al. 2014). These studies demonstrate that content analysis can potentially be used to reveal causal relationships between user-generated contributions over time.

5 Research Desiderata and Future Perspectives

This chapter showed that, in recent years, research on incivility and hate speech in user-generated online discussions has increased considerably and developed rapidly. However, it can still be considered a budding research area that can take very different paths in the future. The rapid growth of data and high public interest in the topic have forced scholars to set priorities on testing new designs and methods, which sometimes requires them to put theoretical and definitional work aside. This conceptual work can and should receive more attention in the future. Open controversial questions can include the following: Where does incivility begin and end? Where does extreme incivility start? How are incivility and hate speech theoretically connected? What do expressions of emotions have to do with incivility? How can sarcasm be embedded within the theoretical concept? The widely varying results of between five and 50% of incivility found in online discussions (Coe et al. 2014; Rowe 2015; Santana 2013) demand more conceptual agreement for a stronger comparative perspective. Another major research gap is the motivation behind incivility and hate speech: Although we have insights into the motivational structures of average users (Eberwein 2019; Ziegele 2016), we have little knowledge about extreme and radical users, who will be less inclined to participate in scientific interviews and surveys, especially those who use uncivil communication and hate speech as strategic communication connected to extremist and radical political groups.

Another important path for future research is to gain more knowledge about online discussion structures and dynamics. How do civil and uncivil discussions evolve, and when and why do they change in tone and purpose? For example, tracking incivility and hate speech dynamics within entire threads and taking the time dimension into account might be one interesting future path. Furthermore, research could test more longitudinal approaches to capture the development of topics or individual hateful users. Thus far, there are no meta-analyses of incivility studies, which could be another step toward a more systematic research field. Finally, the combination of manual and automated content analysis will most likely be the gold standard in future studies. However, it should be noted that the concept of incivility can be highly dependent on cultural imprint, personality, political orientation, and contextual knowledge and can, therefore, cause disagreement even among human coders. It is important that this insight does not lead to capitulation in the face of complexity but, instead, inspires better methods of automated analysis.

Relevant Variables in DOCA – Database of Variables for Content Analysis

Incivility: https://doi.org/10.34778/5c
Impoliteness: https://doi.org/10.34778/5b
Hate speech: https://doi.org/10.34778/5a

References

Agarwal, S., & Sureka, A. (2014). A focused crawler for mining hate and extremism promoting videos on YouTube. In L. Ferres, G. Rossi, V. Almeida, & E. Herder (Chairs), *Proceedings of the 25th ACM Conference on Hypertext and Social Media*. https://dl.acm.org/doi/proceedings/https://doi.org/10.1145/2631775.

Anderson, A. A., Brossard, D., Scheufele, D. A., Xenos, M. A., & Ladwig, P. (2014). The "nasty effect:" Online incivility and risk perceptions of emerging technologies. *Journal of Computer-Mediated Communication, 19*(3), 373–387.

Black, L. W., Welser, H. T., Cosley, D., & DeGroot, J. M. (2011). Self-governance through group discussion in Wikipedia: Measuring deliberation in online groups. *Small Group Research, 42*(5), 595–634.

Boatright, R. G., Shaffer, T. J., Sobieraj, S., & Young, D. G. (2019). *A crisis of civility? Political discourse and its discontents*. Routledge.

Borah, P. (2013). Does it matter where you read the news story? Interaction of incivility and news frames in the political blogosphere. *Communication Research, 41*(6), 809–827.

Brown, P., & Levinson, S. C. (1987). *Politeness: Some universals in language usage*. Cambridge University Press.

Burnap, P., & Williams, M. L. (2015). Cyber hate speech on Twitter: An application of machine classification and statistical modeling for policy and decision making. *Policy & Internet, 7*(2), 223–242.

Chen, G. M., Fadnis, D., & Whipple, K. (2020). Can we talk about race? Exploring online comments about race-related shootings. *Howard Journal of Communications, 31*(1), 35–49.

Coe, K., Kenski, K., & Rains, S. A. (2014). Online and uncivil? Patterns and determinants of incivility in newspaper website comments. *Journal of Communication, 64*(4), 658–679.

Davidson, T., Warmsley, D., Macy, M., & Weber, I. (2017). Automated hate speech detection and the problem of offensive language. *Proceedings of the Eleventh International AAAI Conference on Web and Social Media*. http://arxiv.org/pdf/1703.04009v1.

Döring, N., & Mohseni, M. R. (2020). Gendered hate speech in YouTube and YouNow comments: Results of two content analyses. *SCM Studies in Communication and Media, 9*(1), 62–88.

Dryzek, J. S. (2000). *Deliberative democracy and beyond: Liberals, critics, contestations*. Oxford University Press.

Eberwein, T. (2019). "Trolls" or "warriors of faith"? *Journal of Information, Communication and Ethics in Society, 18*(1), 131–143.

Erjavec, K., & Kovačič, M. P. (2012). "You don't understand, this is a new war!" Analysis of hate speech in news web sites' comments. *Mass Communication and Society, 15*(6), 899–920.

Esau, K., Friess, D., & Eilders, C. (2017). Design matters! An empirical analysis of online deliberation on different news platforms. *Policy & Internet, 9*(3), 321–342.

Ferree, M. M., Gamson, W. A., Gerhards, J., & Rucht, D. (2002). *Shaping abortion discourse: Democracy and the public sphere in Germany and the United States*. Cambridge University Press.

Fraser, B. (1990). Perspectives on politeness. *Journal of Pragmatics, 14*(2), 219–236.

Freelon, D. G. (2010). Analyzing online political discussion using three models of democratic communication. *New Media & Society, 12*(7), 1172–1190.

Gagliardone, I., Gal, D., Alves, T., & Martínez, G. (2015). *Countering online hate speech*. *UNESCO Series on Internet Freedom*. UNESCO. http://unesdoc.unesco.org/images/0023/002332/233231e.pdf.

Goffman, E. (1989). *Interaction ritual: Essays on face-to-face behavior*. Pantheon Books.

Grice, P. H. (1975). Logic and conversation. In P. Cole (Ed.), *Syntax and semantics: Speech acts* (pp. 41–58). Academic Press.

Gutmann, A., & Thompson, D. (1990). Moral conflict and political consensus. *Ethics, 101*(1), 64–88.

Gutmann, A., & Thompson, D. F. (1996). *Democracy and disagreement*. Belknap Press of Harvard University Press.

Habermas, J. (1984). *The theory of communicative action: Reason and the rationalization of society*. Beacon Press.

Habermas, J. (1994). Three normative models of democracy. *Constellations, 1*(1), 1–10.

Halpern, D., & Gibbs, J. (2013). Social media as a catalyst for online deliberation? Exploring the affordances of Facebook and YouTube for political expression. *Computers in Human Behavior, 29*(3), 1159–1168.

Herbst, S. (2010). *Rude democracy: Civility and incivility in American politics*: Temple University Press.

Howarth, C., & Sharman, A. (2017). Influence of labeling and incivility on climate change communication. *Oxford research encyclopedia of climate science*. https://oxfordre.com/climatescience/view/https://doi.org/10.1093/acrefore/9780190228620.001.0001/acrefore-9780190228620-e-382?rskey=79L0zj&result=1.

Huckfeldt, R. R., Sprague, J. D., & Johnson, P. E. (2004). *Political disagreement: The survival of diverse opinions within communication networks*. Cambridge University Press.

Hwang, H., Kim, Y., & Kim, Y. (2017). Influence of discussion incivility on deliberation: An examination of the mediating role of moral indignation. *Communication Research, 45*(2), 213–240.

Kim, J. W., & Chen, G. M. (2020). Exploring the influence of comment tone and content in response to misinformation in social media news. *Journalism Practice, 6*(2), 1–15.

Massaro, T. M., & Stryker, R. (2012). Freedom of speech, liberal democracy, and emerging evidence on civility and effective democratic engagement. *Arizona Legal Studies, 54*(2), 375–411.

Muddiman, A. (2017). Personal and public levels of political incivility. *International Journal of Communication, 11*, 3182–3202.

Mutz, D. C., & Reeves, B. (2005). The new video malaise: Effects of televised incivility on political trust. *The American Political Science Review, 99*(1), 1–15.

Oz, M., Zheng, P., & Chen, G. M. (2018). Twitter versus Facebook: Comparing incivility, impoliteness, and deliberative attributes. *New Media & Society, 20*(9), 3400–3419.

Papacharissi, Z. (2004). Democracy online: Civility, politeness, and the democratic potential of online political discussion groups. *New Media & Society, 6*(2), 259–283.

Phillips, T., & Smith, P. (2003). Everyday incivility: Towards a benchmark. *The Sociological Review, 51*(1), 85–108.

Phillips, T., & Smith, P. (2004). Emotional and behavioural responses to everyday incivility. *Journal of Sociology, 40*(4), 378–399.

Poole, E., Giraud, E. H., & Quincey, E. de (2020, online first). Tactical interventions in online hate speech: The case of #stopIslam. *New Media & Society*, 1–28. https://doi.org/10.1177/1461444820903319.

Popan, J. R., Coursey, L., Acosta, J., & Kenworthy, J. (2019). Testing the effects of incivility during internet political discussion on perceptions of rational argument and evaluations of a political outgroup. *Computers in Human Behavior, 96*, 123–132.

Rosenfeld, M. (2012). Hate speech in constitutional jurisprudence. In M. Herz & P. Molnar (Eds.), *The content and context of hate speech* (pp. 242–289). Cambridge University Press.

Rowe, I. (2015). Civility 2.0: A comparative analysis of incivility in online political discussion. *Information, Communication & Society, 18*(2), 121–138.

Ruiz, C., Domingo, D., Micó, J. L., Díaz-Noci, J., Meso, K., & Masip, P. (2011). Public sphere 2.0? The democratic qualities of citizen debates in online newspapers. *The International Journal of Press/Politics, 16*(4), 463–487.

Santana, A. D. (2013). Virtuous or vitriolic. *Journal Practice, 8*(1), 18–33.
Seely, N. (2017). Virtual vitriol: A comparative analysis of incivility within political news discussion forums. *Electronic News, 12*(1), 42–61.
Stoll, A., Ziegele, M., & Quiring, O. (2020). Detecting impoliteness and incivility in online discussions: Classification approaches for German user comments. *Computational Communication Research, 2*(1), 109–134.
Stroud, N. J., Scacco, J. M., Muddiman, A., & Curry, A. L. (2015). Changing deliberative norms on news organizations' Facebook sites. *Journal of Computer-Mediated Communication, 20*(2), 188–203.
Su, L. Y.-F., Scheufele, D. A., Brossard, D., & Xenos, M. A. (2021). Political and personality predispositions and topical contexts matter: Effects of uncivil comments on science news engagement intentions. *New Media & Society, 67*(3), 894–919.
Su, L. Y.-F., Xenos, M. A., Rose, K. M., Wirz, C., Scheufele, D. A., & Brossard, D. (2018). Uncivil and personal? Comparing patterns of incivility in comments on the Facebook pages of news outlets. *New Media & Society, 20*(10), 3678–3699.
Towne, W. B., & Herbsleb, J. D. (2012). Design considerations for online deliberation systems. *Journal of Information Technology & Politics, 9*(1), 97–115.
Waseem, Z., & Hovy, D. (2016). Hateful symbols or hateful people? Predictive features for hate speech detection on Twitter. In J. Andreas, E. Choi, & A. Lazaridou (Chairs), *Proceedings of the NAACL Student Research Workshop*. https://aclanthology.org/volumes/N16-2/.
Wright, S., & Street, J. (2007). Democracy, deliberation and design: The case of online discussion forums. *New Media & Society, 9*(5), 849–869.
Yuan, S., & Lu, H. (2020). "It's global warming, stupid": Aggressive communication styles and political ideology in science blog debates about climate change. *Journalism & Mass Communication Quarterly, 97*(4), 1003–1025.
Ziegele, M. (2016). *Nutzerkommentare als Anschlusskommunikation: Theorie und qualitative Analyse des Diskussionswerts von Online-Nachrichten*. Springer VS.
Ziegele, M., Breiner, T., & Quiring, O. (2014). What creates interactivity in online news discussions? An exploratory analysis of discussion factors in user comments on news items. *Journal of Communication, 64*(6), 1111–1138.
Ziegele, M., Jost, P., Bormann, M., & Heinbach, D. (2018a). Journalistic counter-voices in comment sections: Patterns, determinants, and potential consequences of interactive moderation of uncivil user comments. *Studies in Communication and Media, 7*(4), 525–554.
Ziegele, M., Koehler, C., & Weber, M. (2018b). Socially destructive? Effects of negative and hateful user comments on readers' donation behavior toward refugees and homeless persons. *Journal of Broadcasting & Electronic Media, 62*(4), 636–653.
Ziegele, M., Quiring, O., Esau, K., & Friess, D. (2018c). Linking news value theory with online deliberation: How news factors and illustration factors in news articles affect the deliberative quality of user discussions in SNS' comment sections. *Communication Research, 47*(6), 860–890.
Ziegele, M., Springer, N., Jost, P., & Wright, S. (2017). Online user comments across news and other content formats: Multidisciplinary perspectives, new directions. *Studies in Communication | Media, 6*(4), 315–332.

Dr. Katharina Esau is a postdoctoral researcher at the Department of Media and Communication Studies at the University of Düsseldorf. Her research interests include digital democracy, online deliberation, digital public sphere, and public opinion formation.


BY



Content Analysis in the Research Field of conspiracy theories in the digital media environment

Jing Zeng

1 Introduction

Numerous efforts have been made in the fields of psychology, sociology, political science and beyond to define conspiracy theories. Although the body of existing literature is vast and complex, the most well-established conceptualizations define conspiracy theories as proposed explanations of an event or a practice that refer to the machinations of influential people or institutions (e.g., Coady 2003; Goertzel 1994; Keeley 1999; Uscinski and Parent 2014).

For a long time, conspiracy theory beliefs were considered to be an abnormal social phenomenon (Hofstadter 1965) and an individual and societal anomaly (Abalakina-Paap et al. 1999). In recent years, however, they have become increasingly "normalised, institutionalised and commercialized" (Aupers 2012, p. 24), penetrating mainstream discourses and popular culture. This trend has fostered growing interest among scholars in examining how conspiracy theories function in legacy and new media. To this end, content analyses have become a highly relevant research method to systematically examine the communication patterns of conspiracy theories. Focusing on digital media, this chapter discusses the application of content analyses to research conspiracy theories. I will start with a brief review of how conspiracy theories are researched in different disciplines. In the following section, I will outline how content analyses have been used to research conspiracy theories that are circulated online. The last section will conclude this chapter by summarizing the main advantages and challenges of conducting content analyses of conspiracy-theory-related data obtained from digital platforms.

J. Zeng (✉)
Universität Zürich, IKMZ, Zürich, Switzerland
E-Mail: j.zeng@ikmz.uzh.ch

F. Oehmer-Pedrazzi et al. (Hrsg.), *Standardisierte Inhaltsanalyse in der Kommunikationswissenschaft – Standardized Content Analysis in Communication Research,* https://doi.org/10.1007/978-3-658-36179-2_39

2 Foci of Research on Conspiracy Theories

Scholars from psychology and political science have made significant contributions to empirical research on conspiracy theory beliefs. Many studies from these fields have sought to investigate the personality traits, cognitive biases and demographic factors that contribute to conspiratorial thinking (Abalakina-Paap et al. 1999; Goertzel 1994; Swami 2012). Surveys and experiments are two methods that are frequently used to achieve such research objectives (for a detailed discussion, see Butter and Knight 2016).

Whereas social psychologists and political scientists are interested in explaining *why* individuals believe in conspiracy theories, most communication research is concerned about *how* specific conspiracy theories interplay with the media environment. In media and communications literature, the most-discussed topics related to conspiracy theories include the anti-vaccination movement (Kata 2010; Smith and Graham 2019), 9/11 truth movement (Banas and Miller 2013; Stempel et al. 2007) and climate-change denial (Gavin & Marshall 2011; McKewon 2012).

In recent years, much research has focused on understanding the impacts of digital platforms on the communication of conspiracy theories (Aupers 2012; Clarke 2002; Wood 2013). It is debatable whether digital media has made more people conspiratorial than in the pre-Internet age (van Prooijen 2018). However, studies show that digital communication technologies enable conspiracy theories to propagate faster and their believers to more easily coalesce (Bessi et al. 2015; Lewandowsky et al. 2012; Miller 2002).

3 Main constructs

In the fields of media and communications, a growing body of research is devoted to investigating how conspiracy theories function in different media environments. To this end, content analyses can serve as an effective tool, especially when combined with other methods such as network analysis (Starbird 2017; Wood 2018) and surveys (Tingley and Wagner 2017). In the context of digital media, the most commonly used data for content analysis is user-generated content (UGC), which is published by individuals to specific digital platforms, such as social media sites and video streaming portals. Tweets (Starbird 2017; Wood 2018), Facebook posts (Bessi et al. 2015; Sharma et al 2017), Instagram pictures (Basch et al. 2019) and YouTube videos (Allgaier 2019; Briones et al. 2012; Mohammed 2019) are the most commonly studied types of UGC in conspiracy theory studies. Additionally, in prior studies of online conspiracy theories, the following analytical constructs are commonly used:

1. Narrative stance: **Narrative stance** differentiates between content based on its positioning toward a specific type of conspiracy theory (e.g., debunking or supporting). As the majority of studies use keyword searches to retrieve conspiracy-theory-related content from digital platforms, the collected dataset can be broad and may even include

large amounts of false-positive content. Content analyses can be an effective method to further filter and categorize UGC collected through keywords. To this end, a binary approach (i.e. support for conspiracy theories = 1, lack of support for conspiracy theories = 0) is widely used (Basch et al. 2019; Bessi et al. 2015; Briones et al. 2012). Literature- and theory-driven approaches have also been employed to develop more complex content categorizations (Basch et al. 2019; Tingley and Wagner 2017; Wood 2018).

2. Content impacts: Traceable user interactions are a distinctive feature of communication on digital platforms, and they allow researchers to assess how users engage with conspiracy content online. Unlike data from traditional media (print media, TV or radios), data collected from these platforms often include metadata that provides insights into how users engage with certain conspiracy theory content. Liking, sharing and commenting are three interaction traces that are often used to assess the **popularity** of online content. Although the numbers of likes, shares and comments are often directly utilized to quantify the impacts of specific conspiracy content (Allgaier 2019), further textual analysis of user comments can reveal more insightful findings regarding the effects of conspiracy theories. For example, in their examination of user comments on Facebook pages, Quattrociocchi et al. (2016) conduct **sentiment** analysis to measure how users polarize around conspiracy theories. In another study of conspiracy theories, Smith and Graham (2019) conduct topic modelling of user comments to examine users and identify **sub-topics** that contribute to the anti-vaccination discourse on Facebook.
3. Source types: Content analyses are commonly performed in webpage analysis to identify **sources** of conspiracy-theory-related content online. Content analysis of webpages can be conducted with varying levels of complexity. At the most general level, researchers can categorize conspiracy-theory-related websites based on **web genres** (Tateo 2005). To achieve a more in-depth understanding of content on websites featuring conspiracy theories, researchers apply more rigorous efforts. Kata's (2010) study of anti-vaccination webpages is a case in point. In this study, Kata developed a detailed list of content attributes to classify anti-vaccination webpages that includes 11 subcategories of anti-vaccination conspiracy theories. Another example is Starbird's (2017) study of conspiracy theories related to mass shooting events. She conducted a thorough qualitative content analysis of the web domains that were propagated on Twitter and coded each page on multiple dimensions, such as its narrative stance (i.e. support or lack of support for the conspiracy theory), orientation (legacy media, clickbait news, conspiracy theory sites, etc.) and political leaning (i.e. left or right).

4 Opportunities and Challenges

In the context of conspiracy theory research, conducting content analyses of digital media data has several benefits. First, digital methods take advantage of the traceability of information and user activities to examine communication in a relatively 'natural'

setting. Surveys and experiments, two commonly used methods applied to research conspiracy theories, rely on self-reported data or staged scenarios. As Mahrt and Scharkow (2013) point out, the absence of direct intervention by researchers enables analysis of aspects of users' online activities that could be distorted by a more artificial setting and more obtrusive data collection approaches.

Second, studying conspiracy theories on digital platforms enables researchers to overcome the constraints of geolocation and conduct research on a larger scale. Most prior studies of conspiracy theories are situated in a single country, and most primarily focus on English-speaking countries. As Gray (2008, p. 167) argues, "There is no single theory of conspiracism that can simply and neatly explain conspiracism, much less one that can be taken from the Western experience and superimposed onto [other cultures] to explain both the breadth and frequency of conspiracy discourse". The affordances of digital platforms and digital methods enable researchers to conduct cross-platform (Starbird 2017; Tingley and Wagner 2017) and cross-language (Thomson et al. 2012) studies of conspiracy theories.

However, the benefits mentioned above come with a cost. For instance, despite the ability of digital methods to access large datasets in a relatively cost-effective way, the validity and scope of content analysis of such data can be undermined by the sample bias. As previously mentioned, studies of online conspiracy theories commonly use keywords for data collection. The consequence of this simplified data collection method is that only content that explicitly mentions these keywords would be included in the sample. In Bruns' (2013) words, such approaches are opportunistic because they 'create and describe a new reality which does not necessarily represent the lived experience of any one user'. Bruns' critique is particularly relevant to research on conspiracy theories because believers often use coded language to communicate (Gosa 2011; Kraski 2017). Merely using general keywords, such as 'anti-vaccination' and 'flat-earth', for data collection can exclude important content.

Sample bias in digital media data can also be caused by platform regulations. Recent years have seen a growing trend of online platforms applying new measures to moderate conspiracy-theory-related content. For example, in 2019, YouTube adjusted its recommendation algorithms to show fewer conspiracy-theory-related videos (Wong and Levin 2019). Additionally, Alex Jones, a far-right American conspiracy theorist, and his infamous program Infowars have been banned from major social media platforms (Isaac and Roose, 2019). Such platform interventions increase the complexity of how researchers can and should research online conspiracy theories. Censorship of conspiracy-theory-related personnel and content causes missing data in content analyses, and algorithmic moderation of the visibility of conspiracy theories means that certain popular content can be 'hidden' from researchers. To minimize the impact of these ambiguities, conspiracy theory researchers working with online data should remain aware of digital platforms' fast-changing policies regarding conspiracy theories. This also requires the current scholarship researching conspiracy theories in digital environments to move beyond mainstream social media, as well as single-platform studies. As

more and more conspiracy theorists and their followers migrate to 'fringe' platforms, such as 8kun, Gab or Parler, new content analysis methods may also be needed, because of the specific platform affordances of these platforms. Another gap in the field is research on the visual communication of conspiracy theories. For example, memes and videos are powerful communicative devices, that have been used to propagate conspiracy theories. Future research should also develop methodologies for systematically researching visual media texts that are used to promote conspiracy theories.

Relevant Variables in DOCA – Database of Variables for Content Analysis

Theoretical typology of deceptive content: https://doi.org/10.34778/5g

References

Abalakina-Paap, M., Stephan, W. G., Craig, T., & Gregory, W. L. (1999). Beliefs in conspiracies. *Political Psychology*, *20*(3), 637–647.

Allgaier, J. (2019). Science and environmental communication via online video: Strategically distorted communications on climate change and climate engineering on YouTube. *Frontiers in Communication*, *4*(1), 1–36.

Aupers, S. (2012). 'Trust no one': Modernization, paranoia and conspiracy culture. *European Journal of Communication*, *27*(1), 22–34.

Banas, J. A., & Miller, G. (2013). Inducing resistance to conspiracy theory propaganda: Testing inoculation and metainoculation strategies. *Human Communication Research*, *39*(2), 184–207.

Basch, C. H., Milano, N., & Hillyer, G. C. (2019). An assessment of fluoride related posts on Instagram. *Health Promotion Perspectives*, *9*(1), 85–88.

Bessi, A., Coletto, M., Davidescu, G. A., Scala, A., Caldarelli, G., & Quattrociocchi, W. (2015). Science vs conspiracy: Collective narratives in the age of misinformation. *PloS One*, *10*(2).

Briones, R., Nan, X., Madden, K., & Waks, L. (2012). When vaccines go viral: An analysis of HPV vaccine coverage on YouTube. *Health Communication*, *27*(5), 478–485.

Bruns, A. (2013). Faster than the speed of print: Reconciling 'big data' social media analysis and academic scholarship. *First Monday*, *18*(10). Retrieved from http://firstmonday.org/article/view/4879/3756.

Butter, M., & Knight, P. (2016). Bridging the great divide: Conspiracy theory research for the 21st century. *Diogenes*, *249–250*(1), 21–39.

Clarke, S. (2002). Conspiracy theories and conspiracy theorizing. *Philosophy of the Social Sciences*, *32*(2), 131–150.

Coady, D. (2003). Conspiracy theories and official stories. *International Journal of Applied Philosophy*, *17*(2), 197–209.

Gavin, N. T., & Marshall, T. (2011). Mediated climate change in Britain: Scepticism on the web and on television around Copenhagen. *Global Environmental Change*, *21*(3), 1035–1044.

Goertzel, T. (1994). Belief in conspiracy theories. *Political Psychology*, *15*, 731–742.

Gosa, T. L. (2011). Counterknowledge, racial paranoia, and the cultic milieu: Decoding hip-hop conspiracy theory. *Poetics*, *39*(3), 187–204.

Gray, M. (2008). Explaining conspiracy theories in modern Arab Middle Eastern political discourse: Some problems and limitations of the literature. *Critique Critical Middle Eastern Studies*, *17*, 155–174.

Hofstadter, R. (1965). *The paranoid style in American politics and other essays*. New York: Vintage.

Lewandowsky, S., Ecker, U. K., Seifert, C. M., Schwarz, N., & Cook, J. (2012). Misinformation and its correction: Continued influence and successful debiasing. *Psychological science in the public interest*, *13*(3), 106-131.

Isaac, M., & Roose, K. (2019). Facebook bars Alex Jones, Louis Farrakhan and others from its services. *The New York Times*. Retrieved from https://www.nytimes.com/2019/05/02/technology/facebook-alex-jones-louis-farrakhan-ban.html.

Kata, A. (2010). A postmodern Pandora's box: Anti-vaccination misinformation on the Internet. *Vaccine*, *28*(7), 1709–1716.

Keeley, B. L. (1999). Of conspiracy theories. *The Journal of Philosophy*, *96*(3), 109–126.

Kraski, R. (2017). Combating fake news in social media: US and German legal approaches. *St. John's Law Review*, *91*(4), 923–955.

Mahrt, M., & Scharkow, M. (2013). The value of big data in digital media research. *Journal of Broadcasting & Electronic Media*, *57*(1), 20–33.

Miller, S. (2002). Conspiracy theories: public arguments as coded social critiques: a rhetorical analysis of the TWA flight 800 conspiracy theories. *Argumentation and Advocacy*, *39*(1), 40-56.

McKewon, E. (2012). Talking points ammo: The use of neoliberal think tank fantasy themes to delegitimise scientific knowledge of climate change in Australian newspapers. *Journalism Studies*, *13*(2), 277–297.

Mohammed, S. N. (2019). Conspiracy theories and flat-earth videos on YouTube. *The Journal of Social Media in Society*, *8*(2), 84–102.

Quattrociocchi, W., Scala, A., & Sunstein, C. R. (2016). *Echo chambers on Facebook*. Retrieved from https://ssrn.com/abstract=2795110.

Sharma, M., Yadav, K., Yadav, N., & Ferdinand, K. C. (2017). Zika virus pandemic—analysis of Facebook as a social media health information platform. *American Journal of Infection Control*, *45*(3), 301–302.

Smith, N., & Graham, T. (2019). Mapping the anti-vaccination movement on Facebook. *Information, Communication & Society*, *22*(9), 1310–1327.

Starbird, K. (2017). Examining the alternative media ecosystem through the production of alternative narratives of mass shooting events on Twitter. In *Proceedings of the Eleventh International AAAI Conference on Web and Social Media* (pp. 230–239). City, State: Publisher.

Stempel, C., Hargrove, T., & Stempel, G. H., III (2007). Media use, social structure, and belief in 9/11 conspiracy theories. *Journalism & Mass Communication Quarterly*, *84*(2), 353–372.

Swami, V. (2012). Social psychological origins of conspiracy theories: The case of the Jewish conspiracy theory in Malaysia. *Frontiers in Psychology*, *3*(280), 1-9.

Tateo, L. (2005). The Italian extreme right on-line network: An exploratory study using an integrated social network analysis and content analysis approach. *Journal of Computer-Mediated Communication*, *10*(2).

Thomson, R., Ito, N., Suda, H., Lin, F., Liu, Y., Hayasaka, R., & Wang, Z. (2012). Trusting tweets: The Fukushima disaster and information source credibility on Twitter. In *Proceedings of the 9th International ISCRAM Conference* (pp. 1–10). Vancouver: Simon Fraser University.

Tingley, D., & Wagner, G. (2017). Solar geoengineering and the chemtrails conspiracy on social media. *Palgrave Communications*, *3*(1), 1–7.

Uscinski, J., & Parent, J. M. (2014). *American conspiracy theories*. New York: Oxford University Press.

Van Prooijen, J. W. (2018). *The psychology of conspiracy theories*. London: Routledge.

Wong, J. C., & Levin, S. (2019, January 25). YouTube vows to recommend fewer conspiracy theory videos. *The Guardian*. Retrieved from https://www.theguardian.com/technology/2019/jan/25/youtube-conspiracy-theory-videos-recommendations.

Wood, M. (2013). Has the internet been good for conspiracy theorising? *PsyPAG Quarterly*, *88*(2013), 31–34.

Wood, M. J. (2018). Propagating and debunking conspiracy theories on Twitter during the 2015–2016 Zika virus outbreak. *Cyberpsychology, Behavior, and Social Networking*, *21*(8), 485-490.

Dr. Jing Zeng is a senior research and teaching associate at the Department of Communication and Media Research, University of Zurich. She researches rumor, conspiracy theories, and activism on social media.



Future of Content Analysis [Die Zukunft der Inhaltsanalyse]



Conclusion

Edda Humprecht, Laia Castro, Franziska Oehmer-Pedrazzi,
Sabrina H. Kessler und Katharina Sommer

1 What We Did: Gaps and Merits of the Book

Just as media content is necessarily a product of selection processes and, thus, represents only part of reality, the content of this book is similarly incomplete: Not everything in communication science that is examined through content analysis could be considered within the scope of this book. There are three main reasons for this limitation: First, because of space considerations, we had to focus on important current and long-established research topics in the field. Second, some topics could not be addressed because there were hardly any (standardized) content analyses available. Third, "some" authors at an advanced stage of writing the handbook chapters had to withdraw due to

E. Humprecht (✉)
Department of Sociology and Political Science, Norwegian University of Science and Technology, Trondheim, Norwegen
E-Mail: edda.humprecht@ntnu.no

L. Castro
Barcelona, Spain
E-Mail: l.castro@ikmz.uzh.ch

F. Oehmer-Pedrazzi
Bern, Switzerland
E-Mail: franziska.oehmer@fhgr.ch

S. H. Kessler
Universität Zürich, IKMZ, Zürich, Switzerland
E-Mail: s.kessler@ikmz.uzh.ch

K. Sommer
Zurich University of Applied Sciences ZHAW, Winterthur, Switzerland
E-Mail: katharina.sommer-vonschoenberg@zhaw.ch

F. Oehmer-Pedrazzi et al. (Hrsg.), *Standardisierte Inhaltsanalyse in der Kommunikationswissenschaft – Standardized Content Analysis in Communication Research,* https://doi.org/10.1007/978-3-658-36179-2_40

the COVID-19 outbreak for various understandable professional and private reasons. As a result, we were no longer able to cover topics such as migration coverage. Due to our decision to divide the book into four parts (journalistic, fictional, organizational-strategic, and user-generated content), we could not discuss cross-sectional topics such as gender portrayals in a separate chapter but, rather, in the corresponding chapters.

Nevertheless, this book offers a comprehensive and unique overview of the state of the art in content analysis research on a broad variety of topics from news coverage (Part II), to fiction/entertainment (Part III), organizational communication (Part IV), and user-generated content (Part V) in communication science. Thus, it also provides an optimal basis and sufficient context for the numerous variables and constructs listed in the Database of Variables for Content Analysis (DOCA), with which the individual chapters are directly linked. Furthermore, it allows us to identify research desiderata, recognize research trends, and anticipate future developments and challenges in content analysis research. In this concluding chapter of the handbook, the research gaps of each chapter are summarized and discussed. We then present the expected trends and challenges of content analysis in the field of communication studies and conclude with a short introduction of the Database of Variables for Content Analysis (DOCA).

2 What We Found: Gaps in Research Using Standardized Content Analysis

The individual chapters in this book point to desiderata in their respective fields of research. Although the research gaps vary by field, most authors note some important overarching aspects, which we address in the following section:

- *Cross-country comparative research:* Several authors maintain that there is a need for cross-national comparative research in order to generalize existing research findings and identify country-specific differences (among others, in the areas of election coverage, science communication, and economic news). Furthermore, there is a lack of research on non-Western countries, as Western centrism still prevails, with Asian and especially African countries rarely being studied. Generally, the chapters in this volume point to a lack of research that goes beyond case studies of a few countries. Systematic comparisons of a large number of countries are arguably needed in order to identify overarching patterns and trends in research as well as current developments, for instance, regarding journalistic reporting styles or election campaign coverage. Finally, large-scale cross-national studies are needed to validate findings on individual countries, such as the (most researched) United States.
- *Long-term studies:* Content analyses often focus on a limited period of time, e.g., one or more artificial weeks in a year. However, several authors in this volume argue that long-term studies are needed to show how content changes over time (e.g., in terms of climate and environmental coverage) and the extent to which these changes are

related to external influences, such as upheavals in media markets or the political sphere. Long-term studies can provide important insights, especially when combined with cross-national research, as such research designs can reveal convergence and diffusion trends.

- *Digital content:* In recent years, content analytic research has increasingly focused on digital content. However, various chapters (e.g., on cultural or technology coverage) show that the focus is often still limited. In general, the authors advocate for an exploration of various content types (e.g., advertising, online reviews, blogs, audio books, web series, etc.) and platforms (e.g. various social media platforms, streaming services, news aggregators, etc.). Doing so would make it more feasible to assess how new and more traditional forms of (online and offline) communication reach specific user groups.
- *Mixed-methods designs and method combinations:* Complex questions and new research objects, especially in the online domain, require methodological adaptations and innovation. Therefore, several chapters call for the use of mixed-methods designs, i.e., combinations of quantitative, qualitative, and computational methods. Such research designs allow for a better understanding of the objects of analysis and current developments. In addition, the authors call for the need to take advantage of extensive datasets by combing (manual and computational) content analysis with survey and experimental or behavioral data to gauge communication effects and implications so as to better grasp dynamic processes.

In summary, various chapters in this book show the highly dynamic and rapidly changing nature of content analytic research. However, proven designs are often transferred to new (digital) research subjects. While this approach shows consistency, adaptations and extensions are necessary to cope with changing communication conditions and data availability. Bridging old and new strands of literature is, thus, important to address classic questions in the respective disciplines for the purposes of comprehensibility, knowledge accumulation, and systematic categorization.

3 What We (Fore)See: Trends & Challenges in Standardized Content Analysis

The use of (partially) automated data acquisition and analysis processes has increased significantly in recent years with the further development of methods and availability of new data sources. Supervised techniques and combinations of automated and manual content analysis have great potential to address complex questions that go beyond counting individual words or actors (see Chapter 3 on automated content analysis). However, both manual and automated methods have advantages and drawbacks that should be considered in the context of research interest (see Table 1).

Table 1 Overview of Strengths and Weaknesses of Standardized Manual and Automated Content Analysis (adapted from Brosius et al., 2012, p. 167)

	Benefits	**Disadvantages**
Automated Content Analysis	• processing of large amounts of text in a short time • category scheme easily expandable • reproducibility • high reliability of dictionary approaches	• ambiguity of search terms, double negations, substitution of terms by pronouns • encoding without context • high redundancy in word choice required
Manual Content Analysis	• capture of semantic content possible • complex encodings possible	• high personnel costs • reliability problems with extensive codebooks • lack of consensus on which reliability and validity tests to run

However, large-scale textual data and digital trace datasets (Internet search archives and social media behavior) from different sources and platforms imply difficulties in terms of text processing and the transferability of machine learning approaches across text types. In addition, there are problems of representativity (e.g., differences in the types of subjects accessing and using different platforms), constant changes in conditions of use for freely available APIs, communication patterns interpreted as individual behavioral signals rather than changes due to the algorithmic sorting of platforms, and limitations in tracking data over long periods of time.

In summary, the above-outlined trends and research gaps in the field of communication not only raise new research questions and (hopefully) stimulate theory building, but they also imply methodological challenges for content analytic research. As several chapters in this handbook show, there is still a strong research focus on established media markets and well-known public actors such as government officials and large media organizations. Furthermore, as noted above, there are still few trans-national and comparative studies, although researchers have increasing access to data from different countries. Most studies focus on individual countries in spite of the fact that digital communication spreads across national borders and is increasingly being used by an international audience. Finally, comparisons across time, which are still rare, are needed in order to fully grasp the long-term implications of the social, economic, and political phenomena outlined in this volume. Future studies should aim to capture the potentially disruptive effects of exogenous shocks (e.g., a pandemic outbreak) in communication processes.

4 The Database of Variables for Content Analysis (DOCA)

The initial idea for this project was to create a database containing a systematic overview of important categories of content analysis, and the book does provide the theoretical and methodological foundation for these variables. To accompany this book, we publish the Database of Variables for Content Analysis (DOCA), which contains analytical variables discussed here. Almost all authors in this volume have contributed one or more database entries on several for the variables listed in the respective chapters of this volume. The database is constantly being expanded and new authors are added. It is open access and thus offers an ideal introduction to the practical application of automated and manual content analysis in various fields of communication science.

Database: https://www.hope.uzh.ch/doca/

Prof. Dr. Edda Humprecht is a Associate Professor at the Norwegian University of Science and Technology (NTNU) and Senior Research and Teaching Associate at UZH. Her research focuses on cross-national studies in news journalism and political communication.

Prof. Dr. Laia Castro is a senior research and teaching associate at the Department of Communication and Media Research (IKMZ) at the University of Zurich and a lecturer at Universitat Internacional de Catalunya - Barcelona. She received her PhD in Social Sciences from the University of Fribourg in 2017. Her main research interests lie at the intersection of political communication, international and comparative media research and public opinion.

Dr. Franziska Oehmer is a senior research and teaching associate at the University of Applied Sciences of the Grisons. She holds a PhD in Communication Science from the University of Zurich and a Bachelor in Law. Her research interests include mediatization (of law), political communication and digital media governance.

Dr. Sabrina Heike Kessler is a senior research and teaching associate at the Division of Science, Crisis, & Risk Communication of the Department of Communication and Media Research, University of Zurich (Switzerland). She holds a PhD in communication science from the Friedrich Schiller University Jena (Germany). Her research interests include science and health communication as well as online search and perception behavior. She tweets under @SabrinaKessler.

Dr. Katharina Sommer is a senior research associate at the Zurich University of Applied Sciences ZHAW. She holds a PhD in Communication Science from the University of Zurich. Her research focuses on the role of emotions and intergroup dynamics for media effects and on effects of advertising.


cc
BY